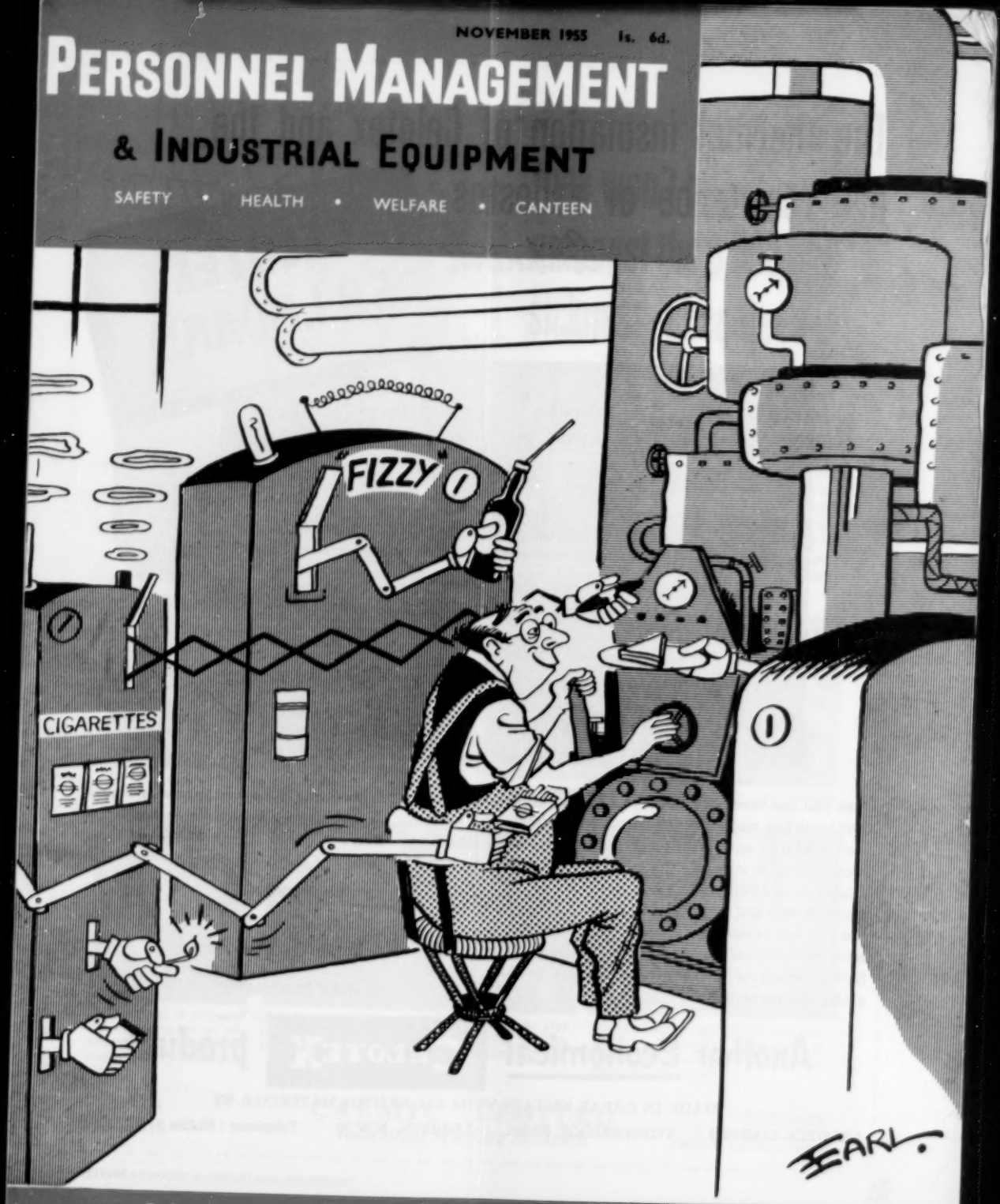
NOVEMBER 1955 1s. 6d.

PERSONNEL MANAGEMENT & INDUSTRIAL EQUIPMENT

SAFETY • HEALTH • WELFARE • CANTEEN

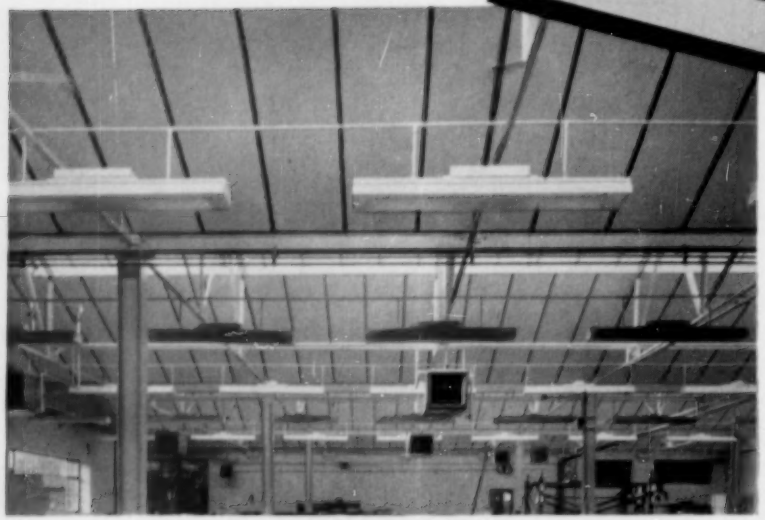


Shops on the Shop Floor (see page 275)

The thermal insulation of Celotex and the fire resistance of asbestos

Combine in

CELOTEX F.R.I. BOARD



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Now you can have both the high efficiency of Celotex cane fibre insulation and the fire resistance of asbestos. They have been combined with great success in Celotex F.R.I. Board. It consists of a core of strong durable Celotex cane fibre insulation sheathed on both sides with asbestos felt. It is as easy to handle and to decorate as normal Celotex insulation—and it is just as economical! Use Celotex F.R.I. Board for wall, roof and ceiling linings and partitions. Samples and further details of this all-British Celotex product will be gladly sent on request.

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* 6,019,400 *insured persons were absent through sickness or injury between October 1954 and March 1955—H.M.S.O. statistics.*

they won't be amongst the 6,000,000* sickness-absentees

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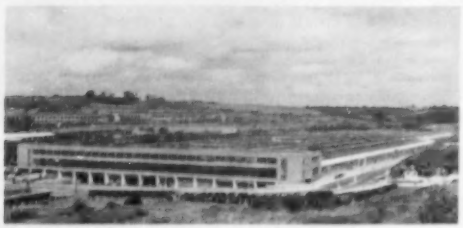
Every year industry is temporarily deprived of over 11,000,000 employees through sickness or injury—reaching a peak in the winter months. Only positive action by enlightened management can reduce this staggering figure. On-the-spot medical and welfare aid for employees has an instantaneous effect in improving attendance—a fact you can prove for yourself.



In large industrial plants sickness absence can cause bottlenecks affecting many departments . . .

. . . the absence of one key worker can disrupt production schedules.

Absenteeism, a primary cause of concern to the personnel manager, in many cases is preventable.

A fully equipped medical department can give early attention to sickness or accidents preventing more serious after effects and prolonged absence.

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Industrial Welfare Division

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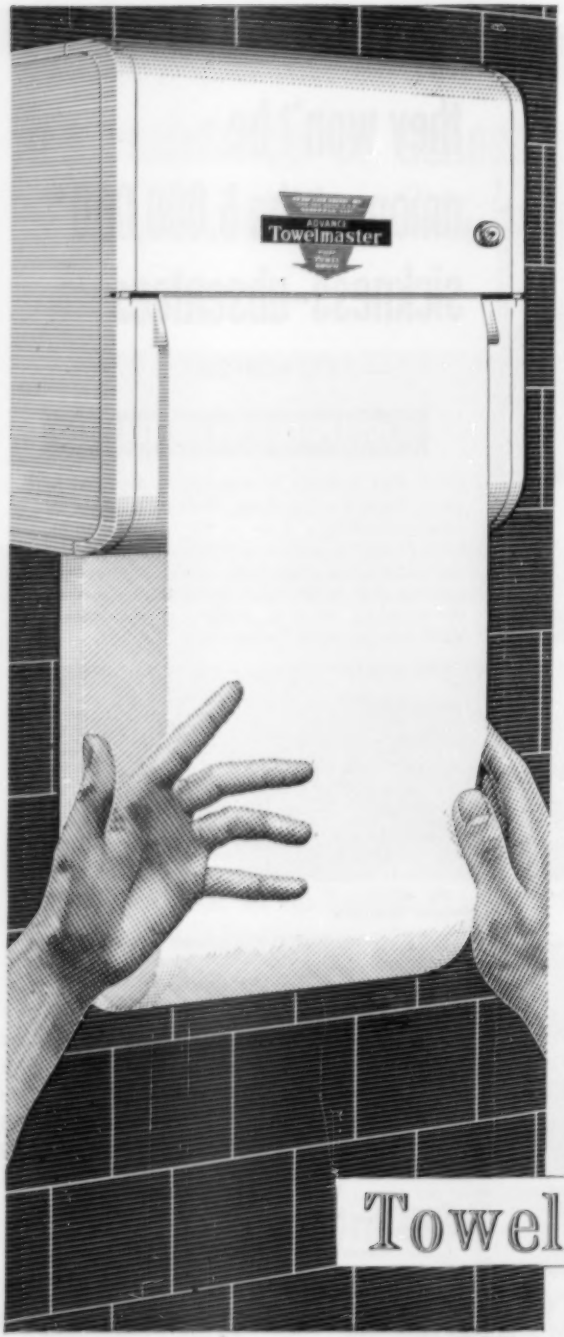

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"REVVI"

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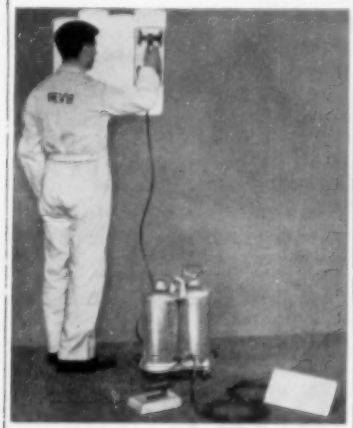
Improves Working Conditions
Stimulates Hygiene



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LIMITED

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NOVEMBER 1955

PERSONNEL MANAGEMENT & INDUSTRIAL EQUIPMENT

SAFETY • HEALTH • WELFARE • CANTEEN

MANAGEMENT OF PERSONNEL

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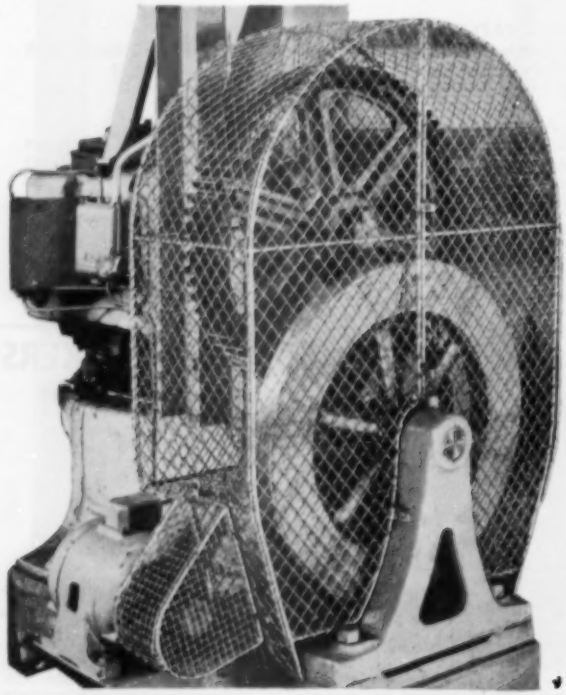

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954

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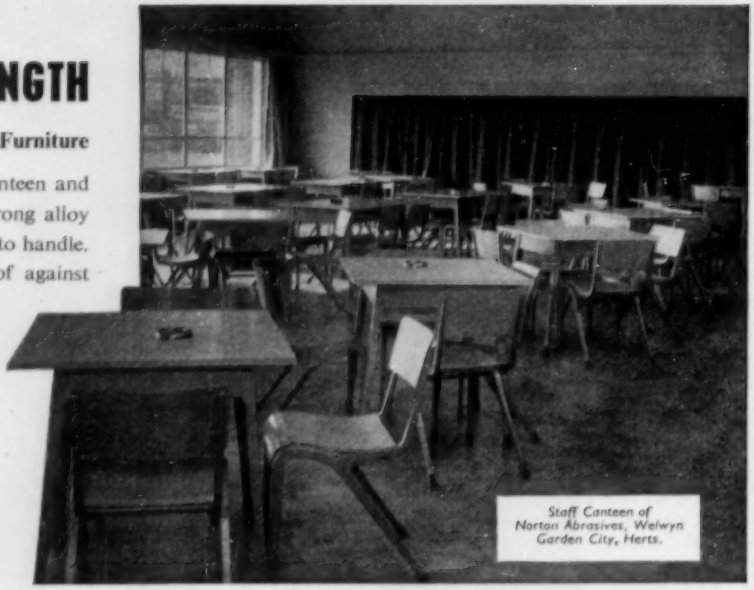

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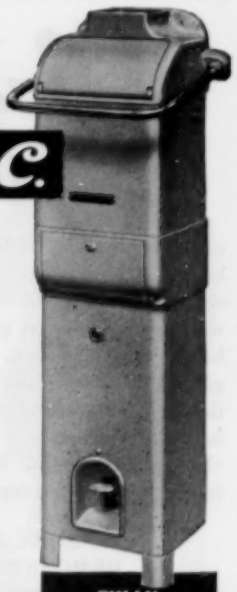

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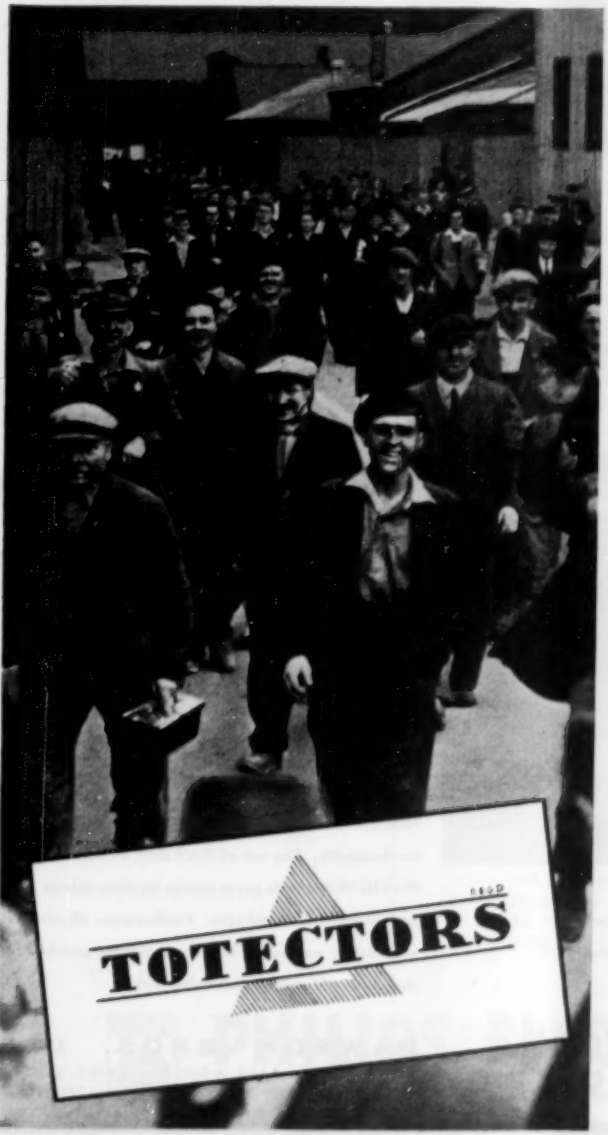

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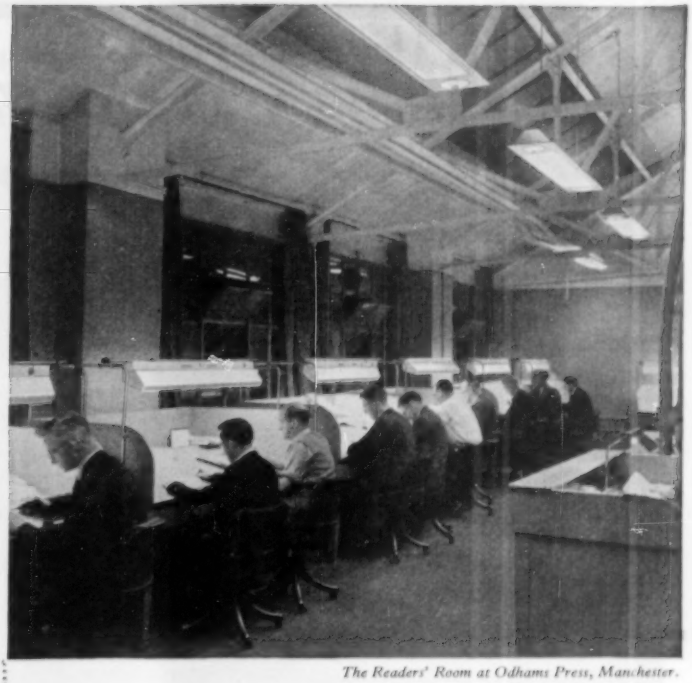

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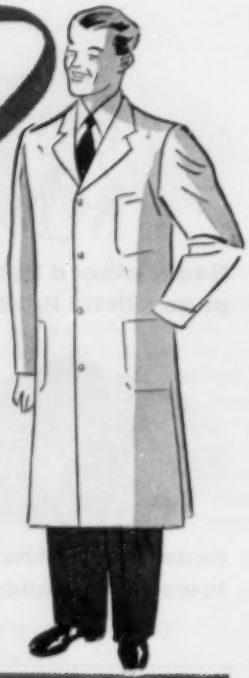

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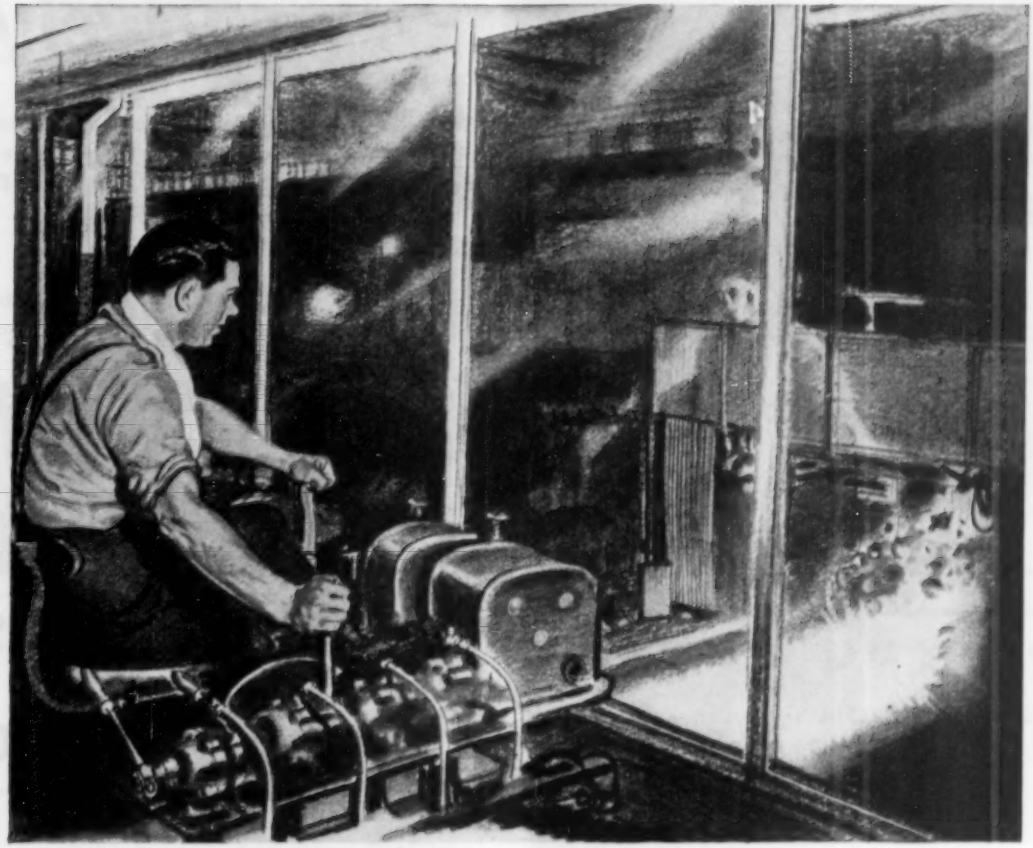

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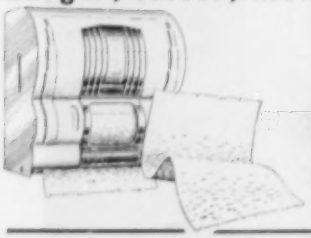

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Self-Service On The Shop Floor

Press-Button Catering Comes To British Industry

Here is a survey of an important new trend in British industry : the advent of the vending machine in canteens, offices and on the shop floor itself. The writer, who recently made a special survey of industrial catering in the U.S.A. where these machines are now in wide use, deals with their probable impact over here. Questions discussed include : Will these machines cut costs ? Will they save time and space ? Will they interrupt production or make for more efficient work ? Our front cover is in lighter vein, but the vending machine should prove an important step in industrial catering.

PERHAPS the most marked way in which American industrial catering differs from our own is in the far greater use of the vending machine. Broadly speaking, the vending machine is a device which delivers goods in exchange for coins. They are used here, of course, in a limited way, but in the U.S.A. every item small enough to be packed into a machine and inexpensive enough to be paid for by metal coinage is sold on the street corners, in railway stations, in stores and restaurants and in the factory.

In every American city there are restaurants called *Automats* in which one complete wall is covered with sectioned, glass-fronted vending machines from which customers serve themselves to every type of food from soup to ice cream. This is the most elaborate form of vending machine. It is refilled from behind and an ingenious system of signals on a board shows the operatives which compartments need attention. It is reckoned that an *Automat* which serves 300 customers in an hour can be serviced by one attendant, whereas even the most limited cafeteria service would need the presence of three people behind the counter, and one to link with the kitchen.

The *Automat* has its disadvantages of course. It is not flexible. The customer who wants peas instead of beans with his main course is unlucky. It's no good asking the *Automat* for a little more gravy or a little less potato. Another difficulty is that to operate an *Automat* one must have premises in which a single long clear wall can be arranged with service space behind its entire length.

In ordinary restaurants and cafeterias the vending machine takes its place beside the human attendant. Even in a good-class restaurant it is possible to get soft drinks from a vending machine or cigarettes, or after dinner mints or candy bars.

Vending Machines In The American Factory

In an American factory the vending machines start in the car parks where those not entitled to free parking can buy themselves two hours' parking time by putting a nickel in a parking meter.

In the reception areas, whether for guests or employees, vending machines offer cigarettes, candy bars, aspirins, indigestion remedies, "coke" and coffee. The cigarette machines are much as our own. For a quarter you get 20 cigarettes from a selection of five or six brands and either a cent or two in change or a book of matches.

By WINIFRED McCULLOUGH
Senior Canteens Adviser, Industrial Welfare Society.

The coca-cola and coffee machines are more elaborate. Most use a syrup concentrate which is discharged when the coin falls. To the coca-cola concentrate is added ice cold water—to the coffee concentrate near boiling water. Attached to the machine is a supply of paper cups arranged in such a way that each one can be handled only by the person pulling it out. The lip of this cup pressed under a nozzle on the machine releases enough liquid to fill it to within half an inch of top. If the coffee drinker takes milk (or cream) he presses the appropriate button and gets it. If he takes sugar another button adds it. The only thing the machine won't do is vary the temperature of the brew or ask the customer did he have a good night.

In the film studio as well ! Starlets at Associated British Studios, Elstree, take time off for a quick drink.

Further inside the factory premises one meets more of the same machines and others containing sandwiches, cakes, pie, soup, hamburgers, frankfurters and hot dogs.

These stand in rest rooms, corridors, changing and recreation rooms. They do not take the place of the employee cafeterias, but they provide the quick snack or the out of hours snack that would be uneconomic if cafeteria assistants were involved in the sale.

In one employees' rest room a whole

wall was devoted to vending machines selling the following items:—

1. Refrigerated sandwiches. Cellophane wrapped sandwiches containing ham, egg, tomato, liver sausage or tinned fish. Either rye or white bread could be chosen. This particular machine sold all types for a quarter. Other machines sell different fillings at different prices. Some keep to a stated price, but a package will contain three half sandwiches of, say, liver sausage, but only two of turkey.

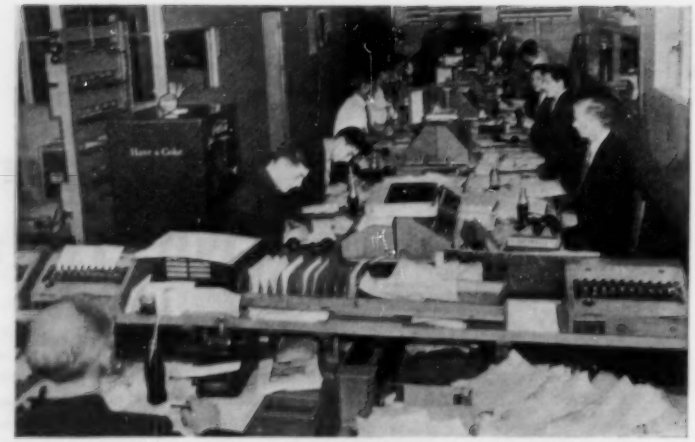
2. Soup. For a dime this machine offered tomato soup, vegetable, cream of chicken or chicken noodle soup. After the indicator had been set to the type of soup required the correct drawer was released and a "hot cup" of soup could be withdrawn. The "hot cup" is a specially treated paper carton which does not affect the taste of hot foods and maintains a fair degree of rigidity when filled with them. One machine also provided a disposable paper spoon. Others left you to drink from the cup. The soup was quite hot, but not, I should think, more than 70°F. An adjacent machine sold "crackers" to eat with it, but some soup machines include a packet of crackers in the purchase.

3. Hamburgers and Hot Dogs. The hamburger is a patty of minced beef put in a mustard spread bun. The hot dog is a frankfurter sausage in a buttered roll. These were sold pleasantly warm from the machine and were folded in a paper napkin. They sold for 35 cents each.

4. Pies. This machine was glass fronted and mildly refrigerated. Eight kinds of pie (segments of large round pies) were shown each in its small compartment with coin slot beneath. Pie cost 15 to 25 cents according to type and each portion was on a rectangular paper plate, with disposable spoon.

5. Ice Cream. Vanilla, chocolate, maple, caramel, mint chocolate, black raspberry, strawberry and walnut ice cream as well as five flavours of water ice and two sorts of choc ice were offered in rectangular, paper wrapped portions. Average price 10 cents.

6. Coffee. Without sugar and cream, or with sugar or with cream or with sugar and cream. Strong, medium or weak brew as desired. Soluble coffee and cream are used in many machines nowadays instead of syrup concentrates.



An automatic self-service cooler in K.L.M. Royal Dutch Airlines offices, New Bond Street, London.

7. Milk. Refrigerated machines offer plain milk, buttermilk, sour milk, chocolate milk, coffee milk. Sold in ½ pint paper containers with drinking "lip."

8. Cakes and Cookies. A non-refrigerated machine selling packed sweet biscuits and cellophane wrapped cakes and portions of cake. 5 cents and 10 cents each.

9. Candies. Candy bars and cellophane bags of fudge. Also tubes of mints, fruit drops, etc. This machine slightly refrigerated because factory temperature too hot for chocolate.

10. Orangeade, lemonade, limeade and root beer. Refrigerated machine. Operated as coca-cola machine previously described.

Vending Machines Available Here

A fair number of vending machines are already available in this country. They are largely for sale outright except where they are designed for the sale of some special proprietary article in which case the manufacturer of, say, the candy bar, will make special arrangements as to the vending machine.

A vending machine costs from £200 to £500. Its lifetime is up to 30 years. There is often a wait of up to six months for delivery of these machines and one or two of those described below are not made in this country at all but imported from Europe. The demand for them is a growing one and more and better machines and faster delivery can confidently be expected in the near future.

Here are brief descriptions of a few of those already available.

1. Coffee—As You Like It

This machine gives change so can be set at any price required. It includes mechanism to deliver a paper cup but buyers could use own cups if preferred. The dial is set very quickly and simply at "Coffee—strong, medium, rich." Sugar—much, medium, little, and cream (or milk)—much, medium, little.

Soluble coffee, soluble milk and granulated sugar are then delivered into the cup and hot water is poured in to the pre-set amount. The water pressure mixes the brew in the cup. The machine's capacity is 500 cups and the time taken to service and refill it is less than 12 minutes. In an office corridor it would take care all round the clock, with the need for a hot drink that if not satisfied, slows down working speed and accuracy.

Tea is not available from these machines yet, but work is being done and the only real difficulty is to get a soluble milk powder acceptable to tea drinkers. The flavour of tea is lighter, more delicate than coffee, and the milk must be absolutely to the general taste.

The machine can be filled with cocoa or with certain types of soluble soup powder . . . the latter being a very popular cold weather snack in the U.S.A.

2. Refrigerated Machines

Soft drinks are sold from refrigerated vending machines of two kinds. The first type sells bottles, the second uses syrup and chilled water and discharges the mixture into a paper cup.

In many ways the bottle is the better proposition. The contents are steri-

lised and are fully controlled in every way for quantity and purity. The filling is simpler and bottles can be discharged more rapidly at busy break times. The syrup type of machine, however, provides a cheaper drink and the quantity can be adjusted to requirements. It does away with the danger of broken bottles. It is easier, also, to store syrup than cases of bottles where space is limited.

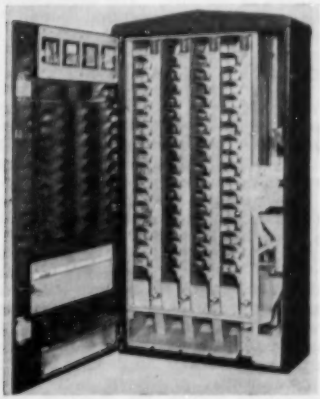
3. Milk

The selling of milk as a beverage from vending machines presents difficulties which, at the moment, do not seem to have been overcome. This is a great pity because cool, fresh, safe milk would be the one thing above all others employers would wish to make available.

The bottle-selling machines is in difficulties where milk is concerned because the caps of milk bottles are not firm enough or sufficiently strongly attached to stay in position when the machine delivers the bottle. I did see in the States, a machine in which bottles were placed in a perpendicular position and moved along to come underneath the delivery panel when the coin fell. Milk in bulk tends to clog nozzles and no machine is available with an agitating device which would offset this. There is also, even were the difficulties of capping overcome, the growing disinclination of dairymen to sell half-pint bottles. Milk in paper containers would answer many of these difficulties. Unfortunately, it is not generally available in this country.

4. Sandwiches

Quite simple adjustments to existing machines (for example, the one designed to sell various types of packaged ice cream) would make the sale of wrapped, refrigerated sandwiches a practical possibility. Meat pies, too, and such items as sausage rolls could be available, safe and in good condition, throughout the 24 hours.



Inside view of the Mars vender which has a capacity of 68 6d. units. It is finished in maroon stove enamel.

5. Ices

Ice cream, acknowledged as a good and proper food, is well looked after by refrigerated selective machines of many kinds.

6. Carbonated Drinks

Machines are also available to dispense the "fizzy" drinks beloved by workers in hot atmospheres. This machine deposits selected flavoured syrup in paper cups, adds ice cold water and finally blends and carbonates into a lively refreshing drink. This particular machine gives change.

7. Sweets

Several vending machines are available through the manufacturers of well-known confectionery. The machines are attractive and can be had on very profitable terms. Chocolate and sugar are excellent sources of nourishment and of quick energy. The only reservation one feels is in the case of young people who may buy sweets instead of meals.

Advantages Of Vending Machines

In the factory the advantages of selling suitable foods and beverages from vending machines are self-evident.

1. The vending machine takes up very little room and can stand in a corner of the cloakroom or against the wall in a narrow corridor.

2. The vending machine will serve, say, 500 cups of coffee, using only 12 minutes of an attendant's time to fill it and 10 minutes of a clerk's time to count and record its takings. Compare this with the length of time it would take a canteen assistant to serve 500 cups of coffee.

3. The vending machine, if well designed and properly serviced, is extremely hygienic. The coffee machine mentioned above discharges a paper cup, which has never been touched by human hands and which is discarded after use. Vending machines can be cooled to any desired temperature so that such things as sandwiches, cream cakes, etc., are far safer for consumption than they would be if displayed on an open counter.

4. The vending machine saves the operatives' time. It is no use shouting at it, talking to it or crowding round it. It was most impressive to see, in American factories, the difference between the business-like approach to the vending machine and the time-wasting approach to the girl with the coffee waggon.

5. The vending machine is not liable to error; it takes coins and gives goods and change. Every item sold from it results in the price of that item safely in the cash box.

There are some disadvantages in the use of vending machines in America which need not obtain here. In the U.S.A. it seems standard for vending machines to belong to contractors who put them into factories, keep them filled and serviced and return to the factory authorities an agreed percentage of profits (usually one per cent). Here, again, it is not necessary to elaborate the difficulties. Most important is that the size of portions, the quality of the food, the condition of the food when sold, and the prices charged for it are outside the control of the management.

Where there is a subsidised employee cafeteria and batteries of vending machines in the same factory the price differential of standard sales, such as coffee, can be an embarrassment. One large engineering firm, which is very concerned with the diet of its employees, itself makes up the coffee, sandwiches, pies, etc., and sells them to the vending company at an agreed

TO BUY OR NOT TO BUY

10 Points To Consider

1. **Cost of machine in relation to probable sales.**
2. **Price for the commodity. Account should be taken of desired period for working off cost of machine.**
3. **The saving of working time if machines are close to working sites.**
4. **The saving of canteen assistants' time.**
5. **Conservation of food and drink in refrigerated machines.**
6. **Machines' accuracy in giving change and getting payment for every unit sold.**
7. **Cutting down of queueing time. The machine is always there.**
8. **The saving of space.**
9. **Neatness and hygiene.**
10. **In many cases a machine can dispense with the need for another counter-assistant.**

price thereby making sure that only food of the desired quality goes to its employees.

Where vending machines are largely used it is generally necessary to make some arrangement for providing change for paper money. In some factories a change booth is provided in the entrance hall, in others a clerk gives change during fixed-time periods in various parts of the factory. This would not be such a difficulty here because we use metal currency more generally.

Time wasting is cut down by the installation of these machines. The objection sometimes voiced that "They'll be eating and drinking all day long" is not a valid one. A cold drink, an ice or a candy bar will refresh and revive in the "weary" periods between breaks and will—as has been proved in the U.S.A.—make for faster and more efficient work.

VENDING MACHINES . . .

What The Makers Say

No Drop In Canteen Sales

DURING 1954 the 660,000 automatic bottle-vending machines then in operation in the United States produced the record sales figure of 330 million dollars. It was late this same year that *Coca-Cola Southern Bottlers Ltd.* introduced an experimental modern refreshment service using the first all-British coin-operated self-service bottle cooler.

A number of these coolers were installed on the factory floor at a plant on one of London's big industrial estates. Each machine was fitted with a coin mechanism adapted to take sixpences and return a penny change for each bottle of coca-cola purchased. *Employees were given permission to use the machines at any time during working hours.*

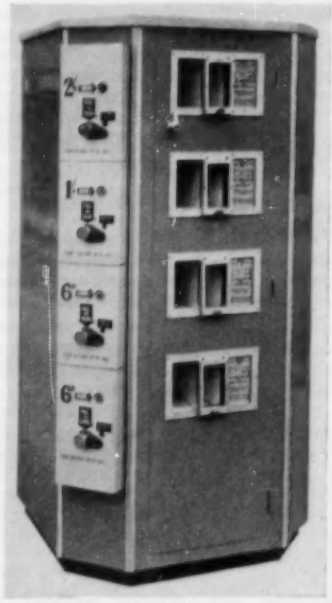
Within three months, *Coca-Cola* claim, this experiment had proved a more than successful venture. Management were convinced that wherever workers can refresh themselves on the job there is an increase in efficiency. The bottler was re-filling each of the coolers several times daily, yet there was no drop in canteen and trolley service beverage sales. The automatic self-service cooler was making additional sales and the sliding scale of commission payable on quantity sales.

Machines have now been installed in factories producing cars, tyres, glassware, biscuits, agricultural instruments, paint, chemicals, furniture, aircraft, chocolates and office machinery. They are also being used in schools, airline offices, rolling mills, cinema foyers, office blocks, laundries and launderettes and by some branches of the armed forces.

Snacks At Arm's Length

DITCHBURN VENDING MACHINES LTD. have designed their *Vendmaster* to take the large type pack of varying shapes which means that, provided the packages come within the dimensions of the individual sections, this machine can vend such things as boxes of chocolates, cigarettes, fruits, sandwiches, cakes, etc. The machine is operated by hand and has four compartments with 31 sections in each. As each has also its own coin mechanism, all compartments can work independently. At the base of the machine is storage space for four or five loadings and at the bottom front is a litter bin.

Advantages claimed for the *Vendmaster* are that workers can obtain their snack needs at arm's length either on the factory floor or in the canteen and that it relieves pressure on canteen staff. The machine carries a one year's guarantee, including the supply of new parts without charge, and sells for £200 delivery and installation included.



The **Ditchburn** Vendmaster

The same firm also make a milk-vending machine which takes 72 pint bottles of milk in three grades if desired.

Forecasts Confounded

PEPSI-COLA has installed its vending machines in about 100 factories and offices in all parts of the country ranging from small plants employing about 300 people to such giants as the Austin Motor Company at Birmingham. The purpose of the machines is not to replace the works canteen or cut out morning and afternoon tea breaks. Rather, this new service is supplementary to them. It provides refreshment close at hand while the worker is doing his job.

The problem of empties has been overcome by the provision of racks by the side of the vender and others strategically placed about the factory or office. Fears of factory foremen and works managers that bottles would be left lying about, get broken and jam machinery have proved groundless.

Forecasts that the British worker would not take to a soft drink have been shown to be wrong. In one London factory some of the workers drink four bottles a day. At the same factory, canteen sales of bottled soft drinks were only 10 a day before a vender was installed. Now they are on the average of 144 a day. The demand varies little between winter and summer or hot and cold weather.

Comment from the personnel officer of a Cambridgeshire metal working firm: "Where output depends so much on the speed of the machine I do not consider that there is any 'lost time' in people going to and from the vending machine. Our experience is that it has saved time in people going to the 'washroom' to get a drink, which often entails staying in there for a chat and a smoke. If the machines are installed on the understanding that as soon as they affect production they will be removed, then I am sure that the people on the shop floor will find ways of using the vending machines without risking this criticism."

Interchangeability

THE *Mars* Automatic Vendor has been developed specifically to facilitate automatic selling of Mars, Bounty and Spangles in industry. The design of the delivery mechanism is centred around the principle of collapsible shelves, in preference to the orthodox rigid container, because the *Mars* range of confectionery to be sold through the machines varies considerably in sizes and wrappings. Interchangeability of products is therefore extremely simple requiring only a change in the product cards which are housed just above the selector buttons.

The machine contains four vertical columns, each fitted with 17 collapsible shelves and each shelf can house a commodity having a maximum overall dimension of $2\frac{1}{4}" \times 1\frac{3}{8}" \times 5\frac{1}{4}"$. Each column is operated by its own individual press-button on the machine front; once a coin has been inserted, the customer may select one of four alternative commodities advertised in glass-fronted display panels by pressing the appropriate button, the selection being delivered together with any change into a tray at the bottom of the machine front, which is common to all four columns.

A Successful Get-Together—But Speeches The "Mixture As Before"

This year's national conference of the Institute of Personnel Management was primarily a social occasion interlarded with speeches. New ideas were few and automation had no place on the agenda. Mr. G. I. Gibbons, the president, did say, however, that there were still some personnel managers who did not know much about the principles behind their work. Otherwise it was very much the mixture as before. Nevertheless the conference had its usual success with some 900 delegates obviously enjoying themselves.

Reported By
THE EDITOR

THE annual conference is now such a firmly established feature of industry in the Western world that one wonders why Mr. Stephen Potter has not yet written on "Conferencemanship" for the novice delegate. As a guide for the ambitious young executive it might well prove invaluable. Armed with such a volume he would learn at a glance what note to strike during the social interludes between sessions and speeches.

These thoughts were prompted by the National Conference of the Institute of Personnel Management at Harrogate from October 7 to 9. This is one of the most popular of managerial gatherings and this year some 900 people turned up and seemed to enjoy themselves hugely. In this they were only following the advice of their president, Mr. G. I. Gibbons, who told them when opening the proceedings—"If you don't enjoy yourselves, it's your own fault." Mr. Gibbons was of course allowing himself some presidential badinage but it is the sort of remark which can start off another train of thought: in this case, reflections on the limitations of any conference on personnel management.

Good management of people will always be based on a knowledge of human needs and desires and the practical ability to ensure that these are satisfied. The psychologists may still have a lot to find out concerning how the mental apparatus works, but the important basic truths about human beings have been known for centuries. In the circumstances one should not expect each of these Harrogate get-togethers to be dominated by some exciting new idea whose application will automatically improve human relations in the factory. It is true that the speech-fare was varied—some of it constructive and some informative—but, despite the eminence of the men who spoke, it lacked brilliance and originality.

However, as one woman personnel officer from the North of England told me: "I come here every year but not for the speeches. I come to see others in the same job, because it's very comforting to know that most of them have the same problems as myself. It makes me feel not quite so 'alone' in my work."

And that is as good a reason as any for holding an annual conference for personnel managers, always assuming that the majority of them feel like that at times!

Nevertheless, one would have thought that the Institute would have included some paper on *Automation* on the agenda. If ever there was a crucial new development likely to affect workpeople, it is this; even a bald summary of what has been happening to date in this field would have been welcome. As it was, we had Sir John Hunt of Everest fame on *Leadership in Youth*, Sir Richard Coppock on *Trade Unionism and its Relationship to Industry*, Sir Ian Jacob on *Some Management Problems in the B.B.C.* and Mr. A. B. Waring, chairman and managing director of *Joseph Lucas (Industries) Ltd.*, on *Current Research into Human Relations in Industry*.

Leadership is always a popular topic for any management conference and Sir John Hunt stressed *his* belief that good leaders were not necessarily born but could be made. The war had brought forth many examples of this and he was convinced that "the quality of leadership is latent in most people". Sir John, however, was chiefly concerned with young people and the question of incentives for those in the "difficult" age-group of 15 to 18. In a rapidly developing scientific age, material progress was monopolising too many minds, hence it was difficult for young people to discern true and lasting values.

Sir John approached the task in the manner of a planned operation. There was the problem: there was too much hooliganism and apathy abroad among young people and only one boy in four in the age-group mentioned belonged to a youth organisation (among girls the ratio was even lower). Then there was the possible solution based on two assumptions: that more *could* be done and that "the best leadership comes from within the group and not from above it".

With this in mind, Sir John suggested a youth training scheme on a national basis inasmuch as all organisations would accept common standards of achievement. And four ways in which latent leadership qualities might be developed were:—

1. The development of a hobby—technical, scientific or artistic.
2. The development of physical fitness—the complement of the hobby.
3. The development of an adventurous outlook (through expeditions and the like).
4. The instilling of a spirit of service which came best of all from example.

Certainly it is not beyond the resources of many of the larger firms in this country to set up pilot schemes

for youth along the lines suggested by Sir John.

"You don't have to study economics, philosophy, psychology and anatomy to tell a man he is sacked", declared Sir Richard Coppock, general secretary of the National Federation of Building Trade Operatives, in a speech that bore most of the traditional hallmarks of trade union oratory. There was the impassioned sincerity, the polemics, references to the 1926 General Strike and the use of words like "humbug" and "humanity". And was there a sly little dig at his audience when he said "we must not allow officers in industry to create little empires"?

Anyhow, shorn of its more obvious embellishments, what Sir Richard had to say was a valuable reflection of how some responsible trade union leaders still feel on the matter of industrial relations. Speaking of the trade union official, he said that too often management humiliated him before they would negotiate with him, especially by insisting that, where there was a stoppage of work, the men must go back before their claims would be considered. Sir Richard also made a plea for taking workpeople into managerial confidence and telling them what a job is about, in particular the plan of operation should be discussed with them—experience apart, there must be some latent intelligence among them, he stressed.

In the course of his presidential address ("These are my own opinions", he pointed out) Mr. Gibbons surprisingly let off an interesting little firework when he said:—

"During the war there was a great influx of people into personnel management, some of whom, because the urgency was so great and real, were required to carry out a number of personnel management functions without knowing very much about the principles behind them, and in consequence trouble sometimes arose.

"**This state of affairs continued to exist fairly extensively for some time during the post war period and, in a much lesser degree, I believe it still does.**

Up To The Branches

"To meet this temporary situation I hope that Branches will make a special point of seeing that in their discussions quite as much emphasis is placed on the principles for which we stand as on the techniques of our work."

However, with the introduction of the Institute's External Examination Scheme sometime this year, the president was confident that in due course all members of the Institute would be well grounded in the principles of their jobs.

After describing at length his impression of industrial relations in the U.S.A. following a visit to that country, Mr. Gibbons reverted to the work of the Institute in this country. He said:

"We are, I feel, entitled to claim that but for the work of the Institute through its members, the present climate of industrial relations would have been much more stormy. The Institute has been an anti-cyclone bringing fairer weather to industry."

Sir Ian Jacob's talk on the Sunday morning on *Some Management Problems in the B.B.C.* was in the nature of a first-class case history. It also gave delegates the chance of having a look at this man about whom so little is heard but who has one of the most responsible jobs in the country. Sir Ian delivered his lecture with a competence and knowledge that stamped him as a first-class administrator and, remembering his audience, he kept his subject geared all the time to the personnel side.

"The B.B.C." he pointed out, "has no criterion of profit by which to judge efficiency, but the staffing is always watched by a Central Establishment Office which is the equivalent of a time and motion department in a normal firm."

Some of the special features of B.B.C. personnel policy stemmed from:—1. The immense diversity of staff. They employed some 45 to 50 nationalities and more than 100 professions and trades.

2. There were very few manual workers although the total number of permanent staff was 13,823.

3. Workers were highly dispersed geographically.

Besides this complex background each individual component of the B.B.C. was exposed to the public gaze before it took its part in the finished product, and there was the continuous press and public criticism that weighed heavily on the organisation. One of the main tasks was indeed to prevent this mass of opinion impinging unfairly on some comparatively unimportant person within the B.B.C. It was a comparatively young organisation—lots of employees were in the 35 to 50 age-group—and a very flexible grading system had been developed so that everyone would have the chance of promotion.

When Sir Ian went on to the effects of commercial television on the B.B.C. staff, he emphasised that the B.B.C. was the only source of trained men from which the I.T.A. could draw. Besides, I.T.A. had had a dead-line to meet so that it had been a case of devil-take-the-hindmost in the face of a spate of tempting offers. These offers were tempting in two ways: higher money and the chance to get in on the ground floor.

The effect on the B.B.C. had been extremely difficult and, to meet it, they had taken special measures in the case of those directly affected. To retain 200 to 300 of their top TV staff, special contracts had been drawn up giving these men very favourable terms.

(*Continued on page 301*)

Everest leader Sir John Hunt (*right*) with the deputy mayor of Harrogate and the I.P.M. president, Mr. G. I. Gibbons (*left*), at the national conference. Sir John outlined a four-point plan for developing youth leaders.

The Letter Without The Spirit

Has Lack Of Sincerity Left Only Privilege And The Pay Packet?

OF great interest to all of us, I think, is the way in which the subject of joint consultation is regularly brought up by one member of the group or another. Mr. Henderson, you remember, raised the whole question again in the August issue. I have received two most thoughtful and stimulating letters, extending and deepening Mr. Henderson's analysis of the reasons for its widespread lack of success. Mr. "J.H.S." of Leicester writes:—

"1. There is often a confusion between means and ends in many spheres of life. It has not been fully understood that no consultative committee is ever likely to create enthusiasm, loyalty and co-operation within a firm and that the most such a committee can do is to make effective these valuable emotions. They can only be aroused in a much more subtle and difficult way and not by merely setting up a committee.

"2. Industrial firms can also suffer from the suburban failing of 'trying to keep up with the Jones' and this occasionally results in the trappings of accepted good practice without the requisite backing of sincerity to make them work.

"3. In the nationalised industries formal joint consultation has been imposed by statute and in some of the larger firms the position is not dissimilar in that the edict to consult was imposed from high above. Quite often, those who have to carry out such instructions—the management representatives on joint consultative committees—do not agree with the point or purpose of it. I believe that it is a latent fear in many managers that joint consultation is a major step down the slippery path to syndicalism. Insufficient attention has been paid to selling the 'philosophy' of joint consultation to those managers who sit on consultative committees.

"4. In a similar way, it is one thing for the T.U.C. to give its blessing to joint consultation and quite another as to whether individual trade union officers are other than indifferent to it. To the best of my knowledge there is little space reserved in the many trade union courses for teaching about joint consultation.

"5. Joint consultative committees often work in virtual isolation. Much more attention should be paid to communications (both ways) between employees' representatives and their electorate and within the management.

"6. A point, oft remarked, is that there is frequently too much delay in action following recommendations. No single thing is more destructive of effective joint consultation.

"Although I believe that joint consultation arose out of an expedient and its principles and purpose have been developed ex post facto, I think it can make a big contribution to securing good industrial relations. If formal joint consultation has not come up to expectations perhaps it has not been honestly tried out."

Keeping Up With The Joneses

This month we have more on the reasons why joint consultation failed. DISCUSSION LEADER stresses that the wish to co-operate must be there as well as the means.

One reader also makes the interesting point that some firms are trying too much to "keep up with the Joneses", hence all sincerity vanishes.

Do you think it is a bad thing to imitate other firms before the workpeople are ready? Or do you think that the trappings act as a spur to the spirit?

Readers' views on this are welcome and as usual we will pay a guinea for each letter published.

One vital truth underlined by Mr. "J.H.S." concerns the principle upon which all *systems* of joint consultation are, of necessity, built. Joint consultation depends on the *wish* of the manager to share some of his decisions with his men. If, as Mr. Brian Anthony says later in this article, the manager "clings like a leech to his notion of traditional privilege and function", then legislation by Acts of Parliament or the edicts of top union officials will have no effect. The legislation and the edicts will in fact be as worrying to the sceptical manager who has to attempt to put them into practice as the order which Queen Victoria is said to have once given to an unfortunate visitor: "Now be funny", she said.

BOTH SIDES TO BLAME

Mutual Lack of Confidence

MR. Brian Anthony suggests that this lack of enthusiasm for joint consultation is equally apparent in trade union circles—not because of any particular feelings of opposition to it, but because the rank and file have less active interest in the trade union movement itself. He says:—

"Whatever may be thought about the failure of Joint Consultation to fulfil the high hopes of those who pioneered its introduction, the reason for its lack of success ought to be apparent to those of us who, having participated in it, have also desired its greater achievement.

"British working men—strangely enough, not women—have been criticised because of alleged inertia arising from the protection and security afforded by the development of the Welfare State. Industrial prosperity produces a decline of interest in the progressive spirit which we once associated with enlightened trade unionism, the effect of which is seen not merely in the failure of members to attend their branch meetings, but is clearly demonstrated in the workshops.

"If the workman is indifferent about the selection of his T.U. representative he will choose his joint production committee delegate in a spirit of levity.

"You have stated in your magazine that 81 per cent. of top ranking executives favour joint consultation. Of course! By such means they keep the tabs on workshop talk and maintain a semblance of friendly relations whilst dealing amiably enough with trivialities, seldom with practical suggestions for improving the product and the production per man-hour. Trade unionists have lost their grip by default.

"Who therefore bears responsibility for the failure of Joint Consultation?

"The employer is at fault because he still clings like a leech to his notion of traditional privilege and function. He is not able to believe that the worker can contribute anything worthwhile except direct work to the efficient management of a very complicated business.

"The worker is not less than equally at

fault because he has allowed his enthusiasm for progress to lapse. His present activity seems to be almost confined to propaganda in favour of a still further shortened working week. The more of the time he puts in will rank for payment as overtime, more money in fact for no more work.

"On balance it would almost seem that the employer is less responsible for the failure of joint consultation than his henchman."

I wonder if Mr. Anthony has been reading the four recent leading articles published by the *Observer* on "Our Industrial Discontents"? The writer of that article suggests that amongst the rank and file of union members "a new spirit" is growing. "The strongest element of this", he says, "may be crudely described as a new materialism—an increase in cash mindedness."

Is it possible, do you think, that this emphasis on money has become more marked than economic pressure alone would dictate because joint consultation, both formal and informal, has failed, so far, to become a major force in British industry? If any skill is taken out of your job and management does not encourage you to become interested in the organisation and purposes of the business, what is left but the pay packet at the end of the week?

Many jobs today are valued for the opportunities they give to earn more money at overtime rates. A reduction in the weekly amount of overtime then raises a storm of protest. Deep needs and deep feelings are centred round the money reward for work. In the shops we all see articles we want to own. At the same time the inflationary situation is draining the money out of our pockets. The pressures on the majority of us to earn more money are very great.

Overtime appears to provide a ready solution. Do you think it is a satisfactory one? Have the senior union officials the same approach to the subject as the rank and file? How does it affect you as supervisors? Do your people work much overtime? Is it inevitable, do you think, with the age of automation not so far away, that the money motive is going to grow still more in importance? Or has joint consultation in many different forms still a chance to provide the individual worker with a sense of belonging and a sense of participation which would satisfy the needs for which money has little significance?

DISCUSSION LEADER

Staff Selection In A Seller's Market—4

How To Interview A Prospective Secretary

By ELIZABETH SIDNEY

Here is the account of an actual interview which was a model of its kind. A managing director was looking for a new secretary and a young woman of 28 was recommended for the post. During the interview he first put her at her ease, then elicited all the information he needed without giving a hint on whether or not she was likely to get the job. At the same time he made a point of confirming that she would really *like* the work and of giving her a full account of what it entailed.

THE words "selection interview" cover a range of procedures, from a two-minute chat and eyeing up and down to lengthy quizzes by panels of assessors. Having a look at the person is generally accepted as the one indispensable element in selection for any grade or type of job. This is understandable, but in some ways it is a pity; selection for some jobs could probably be done more efficiently by tests; and some employment interviews yield so little information that they are hardly worth giving at all.

This does not mean, however, that the interview is not a very useful method of selection if properly carried out. And it is really indispensable in selecting for those many jobs which require social ability and may depend on happy personal relationships.

A secretary's job is an example, and I should like in this article to describe a very skilled interview conducted by a director who was choosing himself a new secretary. The interviewer was one of three working directors of a food distributing organisation. He invited me to be present and offered to discuss his methods and thinking about the interview with me. We agreed that interviews should ideally be private, and that the fairest assessments are made when the applicant can feel free to talk—if necessary, in confidence—to just one person. But this interviewer minimised the difficulty by introducing me to the applicant and explaining that I was there to help them *both* to come to a right decision.

This introduction set the atmosphere. The applicant ceased to feel that she was being judged, and she and the director began an objective consideration of whether she could do the job he wanted done *and whether she would enjoy it*. (I contrasted this opening with others I had heard, such as, "Good morning, madam, I'd just like to ask you a few questions," and "Ah—sit down will you?—I'm rather worried about your lack of experience.")

This director was looking for a secretary who had good shorthand and typing, who could amend drafts and prepare final documents and who could write letters herself on occasion. He wanted someone with the interest and intelligence to learn enough about the business to deal with many routine letters and phone calls herself—a girl who would quickly learn the names and the needs of different buyers and suppliers, and the prices and delivery prospects of the main commodities handled. Lastly in his job as chairman of several committees, he chaired some local civic and trade committees outside the company and the works council inside, and he attended the company management council. For all these meetings he needed an agenda and written information, and he wanted his secretary to plan and prepare the material for him.

Miss Layton

The girl he interviewed was a Miss Layton. He had told several secretarial colleges and agencies about the vacancy and the Principal of one had recommended Miss Layton, an ex-student who had asked her old college to help her find a new job. Miss Layton had completed an application form and after studying it the director invited her to an interview. He discussed the information on the form before she arrived. "She's 28 and has had nine years' secretarial experience—except for this gap of a year when she was 25, I shall ask her about that. She lives in W.14. That should be all right for getting here—I'll check up.

"She took G.C.E. as early as she

could—five subjects at ordinary level and four at advanced. That's a pretty good standard. I'll ask her if she even thought of going to the university—it's a reasonable thing to ask her and you can learn a lot about a person's values from the way they answer a question like that. She was Head Girl and captain of netball and hockey. I wonder if she had to do any organising—I've got to have an administrator in this job.

"Then she went to secretarial college—and left with their Award of Merit in shorthand, typing and book-keeping. This is a good college—they've sent us people before, so we know the award means something.

"Her first job was in an estate agents in Ashford, and after 18 months she went to the local branch of *Jones and Jones*. Six months later she came up to their headquarters. She was there four years and her salary went up by £200. It sounds as though she had a good deal of responsibility by the end—I'll check on that.

"Then there's a year's gap.

"At 26 she went into this film company as the director's secretary—and now she's looking for a new job, wonder why—(I don't ask that on the form; you only get stock answers).

"One thing that interests me is what she wants out of the job. Are we just one firm on her list of possibles or is this something she really wants ? I can't ask that direct—not if I want an answer I can be sure is true.

"I try to ask for facts—for descriptions of people's experiences—and to learn about values and attitudes from that.

"And of course I see what people look like, and how they behave. Too much make-up won't do in our business—and I don't want a frump around either."

As it happened, Miss Layton's appearance and manner could not have been better. She was respectful, practical and friendly, and that and the interviewer's skill ensured a useful meeting. He learned that as Head Girl at her school she did a good deal of organising and monitoring, and that for her third year at *Jones and Jones*' headquarters she had been in charge of a typing pool.

"How did you like that ?"

"Well, I don't mind it. The real trouble is that the better girls all want to be secretaries—I like it better myself, it's more interesting. But I organised teams to get through the work and we had competitions—well, actually, our output went up 25 per cent. after that and they kept the system after I left. I went over to the buying side as secretary to the chief buyer."

So there seemed some evidence that Miss Layton could organise and get people to work for her.

When she was asked about a university career she said that she had been undecided and then her father had died. Her mother had gone back to teaching to pay for her secretarial training. She had wanted to qualify well so that she could start earning quickly. Some questions here about her circumstances showed that the family was now well launched, her mother still teaching in Kent and her brother just through his engineering apprenticeship.

"Do you still feel undecided about the university ?"

"No, I'm glad I didn't try to go.

Six Hints On Interviewing

1. ***Set the atmosphere by a friendly introduction.***
2. ***Find out whether the candidate would really enjoy the job.***
3. ***Ask about past experiences. These are a guide to a person's values.***
4. ***Look for signs of initiative and a sense of responsibility.***
5. ***Tell the candidate exactly what the job entails.***
6. ***Don't make up your mind at once; and allow for your own personal biases.***

I'm not academic really, I'm practical. That's why I want to leave the job I'm in now. They're very interesting people but I've no flair for that sort of thing—no real interest I suppose.

"I like commerce. I loved my job with the chief buyer and I'd have stayed if they could have given me more to do."

"What kind of work did you do then ?"

Miss Layton described her job, which involved a great deal of shorthand and typing but very little work on her own initiative.

"They have management trainees at *Jones and Jones* and they often work as personal assistants to the managers and take over work that a secretary might do. And actually I suppose I was rather young—but I'm afraid I got fed up in the end."

"So you left. What happened between then and joining the film company ?"

What had happened was that Miss Layton had visited France and Germany and Greece, earning a living by teaching English.

The interviewer asked a number of pleasant questions to check up on this general account and determine the extent of Miss Layton's initiative. From questions on her present job he learned that she regularly prepared agendas and material for meetings for her employer. He asked her to describe an agenda to learn the detail and standard of this work.

Then Miss Layton was asked if she had any questions about the job. He gave her full and accurate answers. He pointed out the drawbacks and queries he had in his own mind about her suitability.

"My secretary has to work on her own a lot, and use her initiative. She is often very rushed. People come to her for everything when I'm away. I get bad-tempered when things are forgotten. Perhaps you can cope with that. But there's another thing—we haven't a planned promotion scheme in this company and can't promise what will happen to you. I think you want responsibility, and you can have that as soon as you know the ropes. I can pretty safely say that your job can grow as the company grows, but not much more than that.

"I think the best thing I can do now is introduce you to my present secretary—she's leaving because her husband is moving—and ask her to tell you everything and show you round and give you our standard shorthand and typing tests."

Miss Layton went off with Miss Williams and came back half an hour later to say that she would very much like to be considered for the job. The director promised to let her know within the week.

Throughout the interview he had been interested and friendly—*but he had not said a word which could indicate his own thoughts and values (and so possibly bias the applicant's replies)*. He had given her his whole uninterrupted attention and had gained a thorough picture of her personality and abilities in half an hour. When she had gone he said:

"I think that's the girl for me. But I never decide straight off. I go over my notes and so on when my impressions have settled down. And this time I really have to be careful. I'm a sucker for anyone with that kind of face and I don't want it to sway me!"

(*Continued on page 304*)

Management At Work

1,000 Firms Questioned

A QUESTIONNAIRE to help in ascertaining industry's requirements for technically qualified men and women during the next five years has been sent to about 1,000 Scottish firms by the Scottish Office of the Federation of British Industries.

Particular emphasis is placed on engineering, metallurgy, chemistry, and physics. Firms are also invited to state their needs for non-technically qualified people both graduate and non-graduate.

The purpose of the questionnaire is to provide those responsible for education with all available information to assist them in training such recruits for industry.

"Scotland's unique educational system has an outstanding contribution to make to Scottish industry in playing its part in the industrial revolution which is gaining momentum throughout the world," state the F.B.I.

Robot Wages Clerk

IN the City Treasurer's office of the Coventry Corporation an electronic computer has been installed which takes four seconds per man or woman to calculate gross pay, superannuable pay and superannuation deductions for the 5,000 weekly staff. It also computes net pay and income-tax. The machine is little bigger than an office desk and is fed with punched cards and data relating to hours worked, rates of pay and similar information. Its speed is so high that it is used only to about 60 per cent. of its capacity. Intensive tests made by the internal audit sections have shown that there are fewer errors than one normally finds on wages sheets prepared manually by one officer and checked by another.

Facts About Figures

THE *General Electric Co., Ltd.*, is to run a course of lectures for employees throughout the organisation on the statistical analysis and presentation of data. The aim of the course is to create a wider understanding of statistical methods within the Company and to indicate where they can be used to advantage to improve the productivity and quality of goods.

The lectures will be delivered by Miss Joan Keen, B.Sc.(Econ.), F.I.S., F.Stat.S., Head of the Statistical Service Group at the G.E.C. Research Laboratories. The course will be in two parts. Part I commenced in October and Part II follows some six months later.

Employees from works and laboratories in the provinces will attend a continuous five-day course, and those in the London area will attend for one day per week during five consecutive weeks. The numbers requesting to attend have been distinctly encouraging, and it is expected that further courses will be organised in the future.

Heatwave

THE scorching weather during the summer brought many stories of excellent makeshift relationships between personnel and management in Edinburgh, particularly in the laundries. There were earlier starts, longer breaks and free drinks.

Liddell's Laundry Ltd. provided free minerals and an extra afternoon break for the staff. As a result "there has been no bother at all with the heatwave", said manageress Mrs. Mackintosh.

Nu-Pin Cleaners instituted a shorter working day. "We started the men an hour and a half earlier", said manager Mr. Robertson, "taking advantage of the coolness of the morning. But longer break periods were given."

A. & J. MacNab Ltd. opaqued the skylights to combat the sun, while *Craigmillar Laundries* made minerals available at reduced prices and the women and girls enjoyed those on the grounds outside during extra break periods.

Leadership Lessons

LT.-COL. L. URWICK, O.B.E., M.C., M.A., is to be guest speaker at a new series of lecture/discussions being conducted by the London Polytechnic Management Association during November and December. The series, which will be held on successive Thursdays from 6.30 to 8 p.m., is intended as a once-a-year refresher contribution to the needs of practising managers and executives in business, and administrators, especially in central and local government. The evergreen subject of "leadership" has again been chosen this year and it is one in which Col. Urwick is very deeply interested. Fee for the course is 30s. and 15s. for members of the Polytechnic Management Association.

How to be an Architect

A REVISED edition of "The Architect", one of the sixty odd booklets in the Choice of Careers series issued by the Central Youth Employment Executive, is now available (H.M.S.O. 1s.).

The booklet, which is illustrated, describes the day to day work and responsibilities of architects and their assistants in both firms and public authorities. It discusses some of the basic ideas underlying all architecture and outlines the abilities, qualities and training required by the architect. A section is devoted to openings and salaries.

A Home Of One's Own

A GROUP of leading British members of the Federation of Registered House-Builders left for a month's tour of the United States in September. The objects of the tour are to study the organisation and construction techniques of private house-builder firms in the United States with particular attention to productivity and means of reducing costs and standards of design and performance; to examine the organisation and methods adopted by private house-builders in the United States with regard to the promotion of the ideal of home-ownership.

Form Fever

AS the tide of bureaucracy has receded a little since the war the private citizen has been less afflicted by these compulsory exercises. But business and commerce meanwhile have caught the fever from Whitehall, and a sizable part of business administration now consists of the contrivance, completion, and collation of forms. Wherever efficiency is mistakenly gauged by the amount of visible activity and not by the results achieved there is a tendency to regard a heavy circulation of forms as a mark of keen administration. With the arrival of electronic computers, which live off forms, their further multiplication will require stout resistance; for no one having taken an electronic brain into partnership, will want it loafing about with nothing to do. (**The Times.**)

For Future Executives

A PARTY of 31 senior boys from public schools and 39 undergraduates from British universities are each spending a week in Sheffield as guests of *The United Steel Companies Limited* in order to take part in short courses on iron and steel manufacture.

The aim of both courses is to give an insight into the scientific basis and production methods of iron and steel making and shaping, some characteristic research problems and the way in which a steel company is managed. It is hoped that the courses will be a guide to those who attend in their choice of a future career.

Each course follows a similar pattern, and includes visits to the *Appleby-Frodingham Steel Company*, Scunthorpe, *Steel, Peech and Tozer*, Rotherham, *Samuel Fox and Company Limited*, Stocksbridge and Swinden Laboratories, Rotherham, the company's Research and Development Department. By dividing the parties into small groups for each visit, ample opportunity will be given for discussing points of detail that arise with members of the staff of the various works.

Members attending the courses will be entertained to dinner each evening at University Hall, where they will be able to meet representatives of the company's senior management, take part in discussions and see films on the steel industry.

HOUSE MAGAZINE DIGEST . . .

Other Firms' News And Views

Manual Workers' Course

The industry's scholarship scheme is now in its fourth year and details are on the notice boards.

On the notice boards, too, is another scheme which might almost be called SEEBOARD'S scholarship for manual workers. It is the manual worker traineeship scheme, and it offers to all suitably qualified manual workers the opportunity to carry on with their studies with the help of day release. **(SeaBoard.)**

"A Little Learning . . ."

Amongst graduates there exists an abysmal ignorance of what goes on outside the university. It is up to industry to supply that knowledge, because there are two main evils arising from it. One is the fact that when a young man graduates he is usually frightened of the prospect of going into industry—perhaps on grounds of lack of technical knowledge, perhaps because he vaguely considers it a dirty job, or perhaps because of the old snobbish ideas which are a hangover from 20 or 30 years ago. Or, on the other hand, he may decide to enter industry in the expectation that there is a managerial job and good money there for him. In that event he may get on to a training scheme in a firm for which he is not really suited, and which if he had known more about he would never have approached in the first place. **(Ingot.)**

Two-Way Traffic

A two-way traffic in key personnel between *Leyland Motors Limited* and *Ashok Leyland Limited* is being arranged. From Leyland experienced officials and engineers are to be seconded for a tour of duty in India, and Indian technicians will be coming to attend intensive courses of instruction at the Leyland factories in order to equip themselves to take over the running of the Indian establishment. **(The Leyland Journal.)**

Stranger Than Fiction

What do staff do when they retire? Some, it seems, continue to work. Miss Phyllis Schofield who retired late last year is now working as secretary to actor Orson Welles. She is also busy producing for the Blackfriars Society a three-act play, which opens on September 29. The title?—*Ladies in Retirement*. **(Unilever House Magazine.)**

White For Safety

We have our own safety measures in the works and not the least of them is "the white line" arrangement. You will have noted that at frequent intervals they are freshened up and modified in accordance with adjustments of doorways, change of machine layout and the like.

Their purpose? Broadly to ensure that all persons shall be able to "proceed on their lawful occasions with perfect safety". The wheelbarrow left "only for a moment" in the gangway; the piece of metal or wood dumped outside "temporarily"; the housing "only a few inches over the line" and numerous other simple and apparently innocuous actions may result in a chain of events ranging from a laddered stocking to broken limbs. **(Intercom.)**

The Latest Panacea

The sacred "right to strike" is in danger of ousting the even more sacred right of every man to earn a living; small wonder, therefore, that the Government, responsible Trades Union leaders, and the management of industry are gravely concerned. Exhortations, incentives, higher wages, shorter hours—all have been tried and found wanting. The latest popular panacea is co-partnership. **(Edgar Allen News.)**

Conference For "Anxiety Removal"

MANY young men approach National Service with resentment at the two-year interruption of civil careers, fear of the unknown and confusion over the unfamiliar routines of service life.

It was in the hope of removing these anxieties that the Educational Policy Committee of *Henry Simon (Holdings) Ltd.*, recently organised a pre-National Service conference for its apprentices. Other aims of the conference were to show the young men what opportunities there are for further education and personal development during National Service—opportunities which, if taken, would enable them to go on growing into useful citizens and to come back smoothly into civil life after service.

The apprentices heard a representative of each of the three services explain the National Serviceman's lot and were given a foretaste of many of the aspects of service life that they would meet as new recruits. They were prepared by a lecture and exhibits for the many forms which they would encounter on call-up. In a tour of the depot of a local Regiment they saw for themselves the spick and span barrack rooms, the dining room, quartermaster's stores, assault course and the rifle range where the visitors were allowed to try their skill with .22 rifles.

A foretaste of things military.

CALLING ALL HOUSE MAGAZINES

THE first Directory of British House Journals is shortly to be published. In order to make it as comprehensive as possible the British Association of Industrial Editors is anxious to obtain information from those House Journals not yet represented. The details required are as follows:—

Name of company
Address
Title of House Journal(s)
Name of editor
Frequency of publication
Primary readership:
Employees, agents or consumers
Circulation
Price per copy (if any)
Whether advertisements accepted or not.

All communications regarding this Directory should be sent to Mr. Geoffrey A. Phillips, Hon. Secretary, B.A.I.E., c/o H. J. Heinz Co. Ltd., Waxlow Road, Harlesden, London, N.W.10.

A soldering operation before and after work study had been applied shows great improvement.

One hears a lot these days about productivity exhibitions, but not so many have seen one. Here then we take you round one recently held in South London which highlighted the importance of work study. The symbols on the left have been adopted by work study engineers in this country to denote different types of shop floor jobs. From top to bottom they mean OPERATION, INSPECTION, DELAY, TRANSPORTATION and STORAGE.

What *is* a Productivity Exhibition?

By SHIRLEY MEREDEEN

ANSWER: A Productivity Exhibition is an example of the work of a society dedicated to increasing productivity in the belief that the standard of living will rise only when productivity also rises.

In this particular case a local productivity association wanted to create an incentive to local industries by showing them how work study could improve methods and raise production through displaying examples from firms who had adopted these principles. At the same time, by encouraging employees of local industries to visit the exhibition, the South London Productivity Association attempted to dispel their fears of work study and automation.

Young as this association is, it decided to prove its own worth by taking on itself the organising of such an exhibition. Within six weeks of this decision the doors had opened on a most professional and stimulating show. Housed in the Borough Polytechnic, eight local industries co-operated with individual stands designed to show how, in one way or another, they had introduced work study and subsequently improved productivity, in one case by 100 per cent.

The Exhibition was open to the public who, together with employees, apprentices and representatives of all grades of staff from local industries were encouraged to visit "*their own* exhibition." They were shown examples at each stand of how each firm set itself problems, and solved them. They were shown how they could participate in similar schemes, how they could do a better job for their own and for their employers' satisfaction. Work study had achieved much by simplifying motions and mechanisms in many of the production and clerical operations both on the factory floor and in the office. The physical effort required in many jobs had been reduced, working conditions improved and production increased. The "before and after" effects of particular jobs which had been improved and speeded up after years of a particular routine were remarkable.

An example of work study application to the making of industrial clothing was demonstrated by one firm. It showed an example in wall chart form of the method investigation, work measurement and subsequent operational breakdown on the making up of a bib and brace overall.

A second example from the same firm showed one machinist operating two buttonhole machines on a single unit stand, each buttonhole machine being geared to a particular size of hole. Originally there was a machinist on each machine, but as a result of studies taken on the two operations, it was found possible to improve the method and combine the two operations for one machinist, resulting in a substantial increase in productivity.

Another firm showed how work study had increased productivity both for a soldering operation and in office routine. This firm claimed that the result was due to work study, incentive schemes and job evaluation.

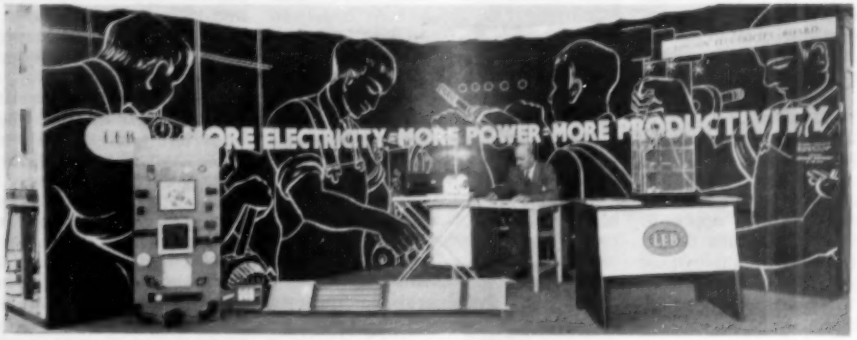
Yet another firm told how they had increased efficiency by forming a Productivity Efficiency Panel. This panel guided teams of investigators in solving problems in which they themselves were closely associated.

Within six weeks this local productivity association had organised an exhibition—not an amateur affair of tables and pamphlets, but one which succeeded in broadcasting the aims and efforts of the group. Success was proved by the response of visitors and their desire to learn yet more about the processes involved in work study. The exhibition was also a prelude to a work study appreciation course which was to follow later in the month, organised by the Association in collaboration with the Borough Polytechnic. The measure of their success was again apparent by the numbers who enrolled for the course as a result of their visit to the exhibition.

When all is said and done, productivity means to work more intelligently. And this Association has shown how the knowledge gained can be put across to firms throughout the country.

The British Productivity Council co-operated with the organisers of this exhibition as it does with all who are prepared to help themselves.

Two operators used to make buttonholes on two machines. Now the job has been redesigned and one operator does the work of two.

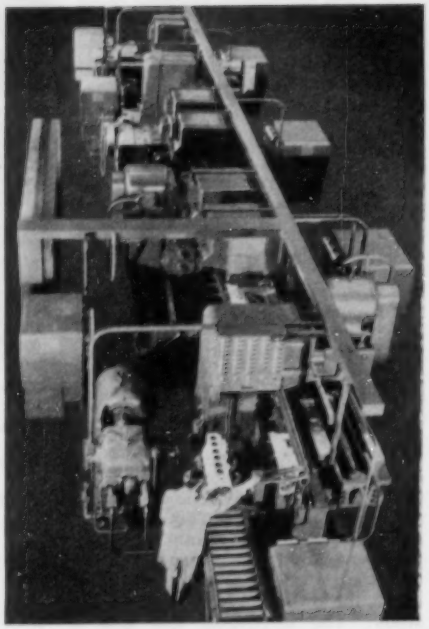


Higher productivity means increased demands on power. The Electricity Authorities keep in line by providing new ways of distributing the increased power.

New Machines For Better Living

By FRANK G. WOOLLARD,
M.B.E., M.I.Mech.E., M.I.Prod.E., M.I.I.A., M.S.A.E.

"With the aid of automation I am of the opinion that we shall enter a new phase of fine living", says the author in this last article of the series. Through it, we can produce more abundantly, more cheaply and more accurately and yet the bulk of jobs will not be affected because automation can only apply to certain types of production. He sums up by stressing that it is not a device to deprive man of his right to work and enjoy the fruits of his labours, but a means by which man's work is made easier and better.



Automation at the **Ford Motor Co.** The transfer machine, however, can only be applied to certain types of production and the writer thinks that the bulk of jobs will not be touched.

I HAVE already said that, in my judgment, there need be no anxiety in respect of unemployment arising from the turnover to automation. It is an historical fact that every advance in machine production has eventually meant more work. The late Laurence H. Pomeroy* once described America as "a place where everybody was working overtime to make labour-saving devices." That remark, made twenty years ago, except for occasional setbacks, still holds good . . . they haven't caught up yet. Nevertheless, Mr. Walter Reuther expresses the fear that automation may bring, in its train, unexampled unemployment. On the other hand, Mr. Henry Ford II, at a recent meeting of the Bureau of Advertising of the American Newspaper Publishers' Association, stated that "automation is a grossly inflated issue".

It is difficult to foresee the future in its entirety, but it must be remembered that automation can only apply to certain types of production and that it will not touch the bulk of employment at all. Automation will undoubtedly help to correct the unbalance which has been troubling our economists—namely, that which will be engendered by the growth of an ageing population coupled with the longer school life for the younger generation. Automation will, by reducing costs, bring to the market—and within the range of innumerable new buyers—goods and devices that have hitherto been denied to them. Also the flood of goods that automation will provide will mean a great deal more work for the distributors—the wholesalers, the retailers and the transport industry.

In support of the foregoing it has been stated that since 1939 total employment in the U.S.A. has risen four times as fast as employment in the manufacturing industries. It has also been pointed out that a small reduction of hours in the non-manufacturing industries would bring a steep rise in the demand for more workers. Since that condition is almost certain to be a result of the use of automation the balance is likely to be maintained.

Equalising Factor

Above all, the general demand for a continued improvement in the standard of living will be the most important equalising factor. Now there are those who, for want of a better phrase, may be said to have a puritanical turn of mind. They believe that the modern world is lapped in luxury to the detriment of the human soul. This is simply not true, as one can verify for oneself by making a list of those things one would buy if opportunity offered. From that list strike out all the purely luxury items—remembering, of course, that the luxury of yesterday is the necessity of to-day.

My point is that there is an almost unlimited public awaiting only the opportunity to buy. We are not, and never have been, within sight of a truly saturated market, and it is unlikely that we shall arrive at a condition when our machines can find no work to do, although admittedly their work may have to be changed. True saturation would mean a condition when all our wants were satisfied, and the correction would be more leisure in which to enjoy the fruits of our labours.

* Past President of the Institution of Automobile Engineers.

This brings us to consideration of what automation will do for the consumer. Automation can do three things. It can produce more abundantly. It can produce more cheaply. It can produce more accurately. Because it can produce more cheaply and more abundantly, it will open the door of opportunity to a much greater public.

The mass production industries cover a wide range. Among those which would benefit from automation are: automobiles; bicycles; electrical components; electronic apparatus; engines (aircraft and others); home appliances; office machines; meters of all kinds; optical instruments, including cameras; refrigerators; radio and television sets. Among these the home appliances are probably the next in volume to automobiles and, in free supply, will probably contribute more in terms of human happiness than anything else that the ingenuity of man has contrived. The housewife, therefore, should have reason to consider automation a boon and a blessing. For leisure the motor car, the bicycle, the camera, radio and television have made life more interesting to many and will, in due course, to very many more who, before automation, would have regarded these things as out of their reach.

Three Fundamentals

Automation depends on specialisation, standardisation and simplification. These are fundamentals without which automation cannot function. Therefore, fashion goods will never fall within the automation orbit. This is not to be regretted, but is rather a matter for congratulation. Automation can provide the basic necessities for a comfortable existence. If we need the wherewithal for fun and frivolity, and I am sure we do, we can have them provided we are willing to pay for them or, better still, to make them for ourselves.

The extension of mass consumption due to automation will probably lead to changes in the methods of distributing goods, and some of the larger concerns are already giving consideration to this aspect of the new abundance. The method and machinery of distribution is another of the many social consequences of automation which students of sociology should regard as being within their province.

One other matter of considerable importance: there is little doubt that as automation grows it will lead to greater leisure. There may be some problems in that connection. This is a matter to which I am now applying my thoughts, but time will not permit me to do more than say that industries will arise to provide for leisure activities and that these will require quite a number of workers. It is estimated that in the U.S.A. to-day 15 per cent. of consumer spending is for leisure activities. There is a new field here which is worthy of cultivation.

With the aid of automation I am of the opinion that we shall enter a new phase of fine living. You may be inclined to regard me as a starry-eyed optimist, but when I look back to the beginning of the Industrial Revolution—even when I look back to my own youth—I am convinced that my optimism is justified.

Machines For Plenty

HOW AUTOMATION CAN BRING BETTER LIVING

1. **Output becomes higher, cheaper and more accurate.**
2. **The flood of goods will mean more work in the distributive trades.**
3. **Reduced costs will give a wide public the chance to buy.**
4. **Automation will check the labour shortage caused by our ageing population.**
5. **Leisure time will increase and, with it, consumer spending on leisure activities.**
6. **Man will be able to produce more with less physical effort or mental strain.**

To-day our factory lasses are neatly coiffured and well shod. In dress they differ little, if at all, from their middle-class sisters. In fact they are the new middle class. They wear silk stockings finer than those available to Good Queen Bess. Their families can hear music that less than fifty years ago was denied even to kings. The theatre is brought to their homes for an annual payment of less than the cost of one box at the live theatre. Light and heat are both available at the touch of a switch and water is on tap (one of the first steps in automation). It is true that all this does not apply to all rural districts, but they are not being forgotten.

What great changes we have seen and what greater and better changes are in store for us . . . if some madman doesn't blow us all up with nuclear weapons! I admit that progress brings its dangers, but, so far, mankind, as a whole, has survived, and has prospered.

We must always remember that automation is not a device with which to outlaw, displace or dispense with man. It is not a contrivance or an invention to deprive man of his heritage—his right to work and to enjoy the fruits of his labours. It is a means for increasing man's stature and for extending his ability to do more and more useful work; to produce in greater volume with less physical effort or mental strain—a means whereby he can bring to his fellows the fulfilment of their lawful desires and, to their homes, comfort and leisure.

We must always remember that men were not made for machines, but that machines were made for man. Whatever device or emblem we may adopt to typify "automation" the motto must be . . . "Machines in the Service of Man".

Workers "Not Antagonistic"

AN interesting account of the attitude to automation of the shop-floor rank and file in the Midlands was given recently by a *Birmingham Post* correspondent who was reporting the motor industry shop stewards' conference on automation at Oxford.

This conference, he said, "bristled with avowed communists" and "little doubt was left that the shop-floor union representation in most of the big motor factories is dominated by communists and others whose views are hardly distinguishable."

"Yet", continued the report, "the frequency with which the speakers referred to the need to 'educate the lads and lasses to our way of thinking' made it fairly clear that the stewards' extreme views are not representative of factory opinion as a whole. The shop-floor workers, for instance, are by no means so hot under the collar about the introduction of automation processes as the stewards would like them to be."

The *Post's* correspondent went on to assert that in his experience most workers have to a large extent overcome their instinctive antagonism to mechanisation and productivity aids, "because experience has taught that in the end they reap a fair share of the material advantages such devices bring".

How Fork Truck Operators Are Taught To Drive Safely

By ROBERT MITCHELL

There is a "highway code" for men who operate mechanical handling units, and its basic rules are described here. One or two of the firms making this equipment run training courses in safe handling for the benefit of industry generally. But, says the writer, it is up to personnel departments to choose first the right people for training.

COMMON to all the best training schemes, a positive, rather than a negative, approach should be adopted when training workers in the use of mechanical handling equipment. Where a driver has been given a series of positive precepts to follow, he will tend to react automatically should his truck or equipment deviate from these rules. When following such a negative precept as "drive carefully", the operator may well overlook some item which is not immediately dangerous, but which may become so under particular circumstances.

Some training schemes follow with advantage the method used at Hendon Police College to train car drivers. In this, the trainee is required to give a running commentary while driving. This scheme not only forces the trainee to talk (and so to think) logically, but also gives the instructor a clear insight into the thought processes of his charge. In particular, the instructor can see whether the trainee has anticipated possible difficulties and dangers far enough in advance to deal with them effectively.

Training courses vary somewhat in detail, but the first step is normally a vocation test or interview followed by a complete medical inspection. Age and body structure have little relationship to usefulness as a truck driver, except so far as they affect the acuity of the senses and the general health.

No physical strength is needed and many firms, particularly in the U.S.A., say that women make better truck drivers than men. It is only fair to say that contrary opinions are generally held in this country.

The essential points to be watched for in a medical examination are good eyesight and muscular co-ordination, normal hearing and general stability. The wearing of glasses is not a serious disadvantage provided that they give a good correction of defective vision. A good rough test is that a number plate can be read at 25 yards. Particularly with women, it is most important, however, to ensure that glasses are worn consistently and not just for the purposes of the test.

The instructor demonstrates how the very compact **Lansing Bagnall** fork reach truck can be made to operate in the minimum aisle width of 5 feet 4 inches.

Conditions normally ruling out the possibility of driving are ear trouble, epilepsy and similar diseases of the nervous system, and heart conditions, including arteriosclerosis. As with normal car driving, some disabilities can be tolerated if properly compensated and if the remaining faculties are satisfactory. For instance, drivers have been successfully trained having arrested or cured pulmonary tuberculosis, deformity or disability of hip, shoulders or the fingers of one hand, even including the amputation of fingers on one hand.

Psychological instability is more difficult to detect. Fortunately for the interviewer, truck drivers are frequently picked from existing personnel for whom employment records are already available.

Aptitude tests vary greatly. Tests applied include those for field of vision, activity, strength of grip, steadiness, foot reaction and hearing.

Thus, one test for the latter is to place the open end of a 3 in. diameter tube against the applicant's ear. This tube is closed at the far end and is provided with four openings—the most important of these being situated 50 in. and 20 in. from the ear. A person of normal hearing can detect the tick of a watch when this is applied to the former of these openings while failure to hear a watch placed at the latter opening disqualifies an applicant.

Activity may be measured by recording the number of "taps" which the applicant can make during a period of 10 seconds. This tests the ability to act rapidly in an emergency and a total of 68 taps is considered necessary for a pass. Foot-tests require that the right foot be moved from the accelerator to the brake in less than ½ second when a green light changes to red.

It may be suggested that these tests are not truly representative of the motions encountered in service. In particular, foot movements are not required for driving a pedestrian controlled truck. It must be remembered, however, that a driver may be switched from such a truck to a tractor if the size of works is increased or if more equipment is purchased. Moreover,

A trainee is made to bring a load down a ramp backwards to impress upon him that a load must never be carried foremost down a ramp.

the proof of the pudding is in the eating and the application of these tests to a group of existing drivers showed a close correlation between test score and ability as a driver.

By weeding out those who achieve a low score, not only is safety increased by removing those most liable to accidents, but time and money are saved by training only those likely to be successful.

Important as are these checks, perhaps the most essential feature of a satisfactory applicant is keenness. A bored driver can do much to vitiate the best transport system and may well do untold damage merely by neglect of essential precautions.

Much can be done by the firm itself to stimulate such interest in the job. Firstly, drivers take much more care of a particular vehicle if they use it day after day rather than being switched from one to another. Many firms on single-shift working allocate one truck to one driver, who operates it exclusively unless something exceptional, such as illness, intervenes. In one large factory handling cosmetics, this system has been so successful that the girls driving the trucks regularly "shine up" the paintwork of "their" truck during their lunch hour. Such extreme pride is perhaps exceptional. However, the friendly rivalry which arises between fellow drivers inevitably leads to increased efficiency and certainly extends the life of the truck.

Having selected the most appropriate operators, training can commence. The first step is to familiarise the operator with the construction of the truck. This leads naturally to an explanation of the motive unit and the method of starting, controlling and stopping. The use of the other controls, such as "raise", "lower", "tilt forks", can then be practised, no load being involved at this stage.

Methods vary, but most instructors now allow the trainee to get the feel of the truck by manoeuvring—first in simple situations and then over more complex circuits which allow little room for mistakes.

When the budding driver has achieved full control over his machine and can drive it down a lane only 3 in. wider than the truck without touching the sides, the time has come to allow him to operate with a load. Before this permission is given, he should be put through a rigid course in judging the weights of different loads. In this way, the driver learns the essential lesson of what may be carried safely and what loads are dangerous.

During the early stages of training, courses or circuits are erected using light poles, tapes and frames which will hurt neither the truck nor the driver in case of a collision. The time has now come to substitute the normal solid objects met with in practice. Even here, it is a good policy to provide a semi-solid "course" as an intermediary. Empty packing cases and drums form suitable obstructions which cannot be brushed aside readily, but which will not cause serious damage in case of misjudgment.

It is generally advisable to introduce load handling by means of pallet and stillage trucks rather than fork trucks. This is because the former cannot be rendered unstable however greatly they are misused. With a fork truck, however, the load is carried outside the wheelbase and an inexperienced driver can throw it out of balance by picking up too heavy a load, particularly on an incline.

The gradual increase in the complexity of training throughout the period gives the instructor a good chance of detecting unsuitable candidates before they do any damage. Care should be taken to throw in easy problems from time to time to see that over-confidence and carelessness has not arisen. In each case, trainees must pass out as proficient in each set of operations before proceeding to the next. In this way, all finishing the course are ensured of having a close degree of control over their truck and a good working knowledge about its working principles.

Those passing out of one particular scheme are given a driving certificate, which is an impressive little folder containing a personal photograph and a set of positive rules to ensure good driving.

This article does not intend to suggest that every firm, however small, should run a training scheme for truck operators. A typical course would involve about five trainees. Even medium sized firms would only require to train this number of operators periodically. For this reason most reputable truck manufacturers run their own training schemes at which customers' operators can be trained. The accompanying illustrations are, for instance, of such a course run by *Lansing Bagnall Ltd.*, at their Basingstoke works. This firm, who claim to make the widest range of materials handling trucks in Europe, have courses covering not only driving but also the maintenance of their products. This means that operators can be trained before the trucks are delivered to their firms so that they are in a position to start using them immediately.

Though such courses remove the need for running a training scheme, they do not absolve the firm's personnel department from the need for adequate selection. A training scheme run by some other organisation can reject individuals as unsuitable drivers. It cannot, however, detect which operator would have proved suitable without seeing them. In such cases, therefore, the problem falls into two parts. First, the best operator must be weeded out for training. Second, the training must be inculcated.

Ten Hints on Good Driving

1. **Estimate load weight before lifting: if in doubt—ask.**
2. **Raise load only 6-8 in. above ground for transport.**
3. **Tilt forks backwards before moving.**
4. **Elevate load only when approaching stacking area.**
5. **Judge clearances before trying new routes: if in doubt—measure.**
6. **Keep every part of the body always within the outline of the truck.**
7. **Take loads backwards down ramp for stability.**
8. **Read notices on permissible floor loads, especially on old floors and in lifts.**
9. **Always concentrate on driving and never take passengers.**
10. **Remember and observe the rules of the road.**

The Case Of The Torn Trousers

IRVING CHANDLER'S trousers were his undoing. He was unloading bottles for the *Dr. Pepper Bottling Company* when he tore the seat out of his pants. Delivering drinks to the plant's customers with that part of his anatomy exposed did not accord with company rules or the conventions of society; so Chandler was told to go home, change his trousers, and hurry back. He was on the way home, following his boss's instructions, when the bicycle he was riding was struck by a car and his leg was broken.

Chandler sought compensation for this injury, stating that it was his employer who sent him home, thus putting him in a position which led to his injury.

The court did not reason in the same fashion. The employer did not furnish Chandler with his clothes, which he necessarily had to wear. His trip home was to change trousers, and this was a matter purely personal to Chandler. Changing his pants was not one of Chandler's duties to his employer. *Dr. Pepper Bottling Company* did not furnish him the bicycle, and the use of the bike was unknown to the employer. Neither did the employer select the route.

Chandler's danger, concluded the court, was such only as that to which the general public is exposed, and workmen's compensation cannot be extended to cover every hazard of life everywhere. Claim disallowed. **(Occupational Hazards.)**

Fire!

CONVERSION OF BUILDINGS is the title of a very useful booklet lately published by the Fire Protection Association at 15, Queen Street, London, E.C.4. It deals with fire hazards in the case of large houses which were previously private dwellings and have now been converted into offices, schools, research establishments, hospitals and the like.

There are always a number of fire hazards that may be introduced when converting an old building for modern use that cannot be excluded by compliance with bye-laws, and the booklet gives guidance where bye-laws may not. Copies will be supplied free on application to the Secretary at the above address.

Volts!

ELECTRICAL Accidents And Their Causes is the title of a booklet published a few weeks ago by the Factory Department of the Ministry of Labour and National Service. The booklet, which is in three parts, classifies and analyses the total reportable electrical accidents for 1953; these numbered 744 of which 40 were fatal. It stresses that, although understanding of electrical apparatus has improved, there is a residue of people who do not appreciate the need for care when working with this equipment.

The second and third parts of the booklet describe various hazards and the equipment available to counteract them.

Atoms!

THE atomic energy industry at the present time is widely believed to be safer than industry in general but, says the September number of *ILO News*, there is the danger that familiarity with ionising radiations may breed contempt. Large mass production industries which use atomic materials only incidentally may not take the same precautions which marked the first controlled experiments in the field.

The International Labour Organisation urges firms to take four steps to deal with this potential danger. These are:

1. Establish codes of practice and national preventive legislation.
2. See that these are effectively enforced.
3. Take any additional prevention action as is desirable (technical, medical, educational).
4. Organise training programmes.

Declared the *ILO*: "The mistakes and miseries made during the first industrial revolution should not be repeated during the forthcoming second (atomic) industrial revolution."

SIGN OF THE TIMES

Dangerous Radiations. This danger symbol, already used on labels in the international shipment of radioactive materials, was approved at the last session of the International Labour Organisation's Chemical Industries Committee.

Safety Wrappings

LINKED with a series of Safety First Weeks which are now being organised in various districts of the country is a big new campaign to educate children on the road. *Robertson & Woodcock Ltd.*, makers of "Trebor" sweets, working in conjunction with Safety Week Organisers, have developed what they fondly call Highway Lollies. On the wrappings of these sweets are printed eight different road signs or safety rules so that children can learn about kerb drill, halt signs and safety slogans in the pleasantest way.

Here is an idea which could well be developed into other walks of life. In this era of prepackaged goods no opportunity should be missed in which we can impress on the public the importance of Safety First. Manufacturers of all products could well follow suit. For, as *Robertson & Woodcock Ltd.* say, if one life is saved then all their efforts will be worth while.

CANTEEN ADVICE BUREAU

By L. BANHAM, A.M.H.C.I., A.R.San.I.

Readers are reminded that this Bureau has been set up specially to deal with their catering problems and information needs. All queries are answered promptly, and should be sent to The Canteens Adviser, c/o The Editor.

Useful Menus

Can you recommend a book of menus suitable for use in the directors' and senior executives' dining-room?

IT is probable that you would find *Good Housekeeping's* "Menus" very interesting and useful provided that you adjust the recipes to suit your particular needs, and within the limits of your food cost allowances. Our library department will be pleased to loan you a copy of this book which is published by *The National Magazine Co., Ltd.*, at 10s. 6d.

Kitchen Planning

We understand that there is a booklet published free of charge dealing with Kitchen Planning and Design. Could you advise us where to apply for a copy please?

YOU are doubtless referring to the booklet issued by *Stott's* of Oldham which has the title "Large Scale Kitchens and their Planning" and we have pleasure in forwarding a copy to you. The table giving the recommended type of equipment for serving varying numbers of meals is especially useful. (*See page 301.*)

Counter Barrier

We wish to install a service counter barrier in our canteen but we should like one which does not require to be screwed into the parquet floor. Can you name a supplier?

THERE is a reluctance amongst manufacturers to make a counter service barrier which does not have its uprights fixed permanently to the floor. The barrier is primarily to stop crushing and for that reason needs to be strong. We are, however, submitting to you details of a weighted base type which might suit your needs. A sketch of this model with particulars of prices is enclosed for your consideration.

People At Work

Older but As Good

THE results of a study by the personnel director of an American hospital throws new light on the ever topical question of employing older people on manual operations. They suggest that age has very little bearing on satisfactory performance among certain types of industrial workers.

The personnel director, Charles H. Meyer, studies the productivity level, work quality, absenteeism, and accident records of weavers employed at a carpet factory in Brooklyn. Comparing the under-45's with the over-45's, he found that it was impossible to make a case for the superiority of either group. Most differences between the two groups could be attributed to chance variations.

Reporting his findings in a journal published by the New York State School of Industrial and Labour Relations, Mr. Meyer says: "Much of our nation's high standard of living is due to the high level of productivity of the individual. But discrimination against workers over 45 years of age and a continuing rise in the proportion of older people in the population may adversely affect this productivity."

How can the older worker employment problem be solved? Mr. Meyer suggests: (1) job descriptions and analysis should be written more specifically in terms of physiological requirements; (2) machines should be used to measure the visual and motor ability of the older worker. **(Business.)**

Campaign Gets Results

REPORTS from the Ministry of Labour indicate that more and more employers are giving sympathetic consideration to the older worker. This was stated at a meeting of the London and South-Eastern Regional Board for Industry.

Many placings, it was stated, had been made which would never have been achieved before the commencement of the national campaign. For example, 15 persons between 65 and 76 years of age had been placed as messengers with a City company. The employment was for four hours a day and the times, within limits, were at the worker's own choice.

Back to School

EIGHT departmental managers at the Berkley Street (Birmingham) works of *Rowe Bros. & Co., Ltd.*, have made history in the builders' merchants' industry by going back to school.

Their "schooling" has been in subjects concerned with management, in particular the importance of knowing how to pass on their specialists' knowledge so that their own efficiency, and that of their firm, is improved. At the suggestion of Mr. W. S. Shirra, *Rowe Bros.* divisional director, the managers of eight departments—transport, catering equipment, casement, paint, sanitary, brass, grate and range and builders—formed a "class" for a Ministry of Labour Training Within Industry course. It is believed that *Rowe Bros.* is the first firm in the builders' merchants' industry to participate in T.W.I., a free Ministry service which has assisted more than 300,000 people since, in 1944, it began its work of helping men and women in supervisory grades to pass on their skills and experience.

For five days the *Rowe* instruction group spent two hours each day, on their own premises, with Mr. B. O'Higgins, a Ministry instructor, who emphasised that the purpose of the course was "to get complete understanding, and to get something done correctly, quickly, safely and conscientiously". The students, whose individual supervisory experience ranged from 34 years to 12 months, were unanimous in their conviction of the scheme's value, and one summing-up was "It has clarified our thinking, and that must be of benefit to us and to the company".

Status Luncheons

AS part of its work in the educating and training of foremen, the Industrial Welfare Society has started an occasional foremen's luncheon. The idea is to give foremen the chance of hearing eminent speakers on contemporary matters of importance. The Society also believes that this development will also make managements aware of the individual foreman's ability and status in that he will represent the company on these social occasions.

The first luncheon was held on October 20 at the Rembrandt Hotel, London, S.W.7, where Graham Hutton spoke on "Britain's Economic Problems." It is intended to extend the idea to other big industrial centres.

That "Nice Feeling"

MORALE is high (at *Marks and Spencer's*)—and so, in full employment, is labour stability. Promotion (except for technicians) is from within, and average pay is above the outside average. Welfare facilities include subsidised hairdressing salons in many stores, subsidised chiropody, free medical and dental advice, rest rooms like club lounges, roof gardens at the newer stores. Yet when I asked girls what they liked most, pay and promotion prospects came first, "a nice feeling" in giving customers value for money came second and the more obvious welfare facilities third. **(Picture Post.)**

Seal Of Generosity

PAY packets in 300,000 British firms and factories may lose a little of their loose change in the next few weeks if the National Spastics Society has its way. For the Society is asking staffs to donate a few coppers in exchange for colourful Christmas seals.

160 million of the seals, with their typical seasonal motifs of angels, robins, and so on, will be distributed altogether. They will go to shops, schools, firms and factories all over Britain, and to all establishments of the armed forces at home and abroad.

With them the Society hopes to raise £250,000—a quarter of the million pound target it has marked down to finance its five-year medical research programme, and the setting up of schools, homes and treatment centres for spastic children and adults.

Last year's seals were so popular that the Society has now established three schools, a home for adult spastics, and 20 local treatment centres, and hopes to set up two training centres in the near future.

A Personnel Manager's Dream Comes True

ON the suggestion of the workers themselves, 2,600 of their relatives and friends recently visited the *Exide* Works, near Manchester, to see the various processes of manufacturing batteries. Over 150 workers volunteered to man the machines on the Saturday afternoon. No official guides were provided: the employees themselves looked after their own families and friends and explained in detail the work that was going on. So great was the application for admission that the list had to be closed some time before the Saturday.

Visitors watch a volunteer worker mould plates for miners' cap lamp batteries.

A New Aristocracy

IS there a new aristocracy of the working-class and, if so, who are they? On both these points the *Birmingham Post* entertains no doubts whatever: they are the men who work in the car industry.

In the last comprehensive M.o.L. review of wages and hours worked (that for April this year), the newspaper points out that the average weekly wage drawn by men in the car industry was £13 11s. 7d. compared with an average of £11 4s. 7d. for manufacturing industries as a whole.

"It would be wrong," the paper goes on, "to believe that he earns extra jam for his bread by working harder than anyone else. He does not. He does less work than the average—47.4 hours a week compared with the average for the manufacturing industries of 48.6 hours and for industry as a whole of 48.9 hours."

"Work" Breaks

MANAGERS who are somewhat tired of stereotyped exhortations to higher productivity may be interested in a memorandum of unidentified origin quoted by the newsletter of the Personnel and Industrial Relations Association of Los Angeles. It reads:

TO ALL EMPLOYEES

Due to increased competition and a keen desire to remain in business, we find it necessary to institute a new policy—

Effective Immediately—

we are asking that somewhere between starting and quitting time and without infringing too much on the time usually devoted to lunch period, coffee breaks, rest period, story telling, ticket selling, vacation planning and the rehashing of yesterday's TV programmes, each employee should endeavour to find some time that can be set aside and known as the "Work Break".

To some this may seem a radical innovation, but we honestly believe the idea has great possibilities.

It can conceivably be an aid to steady employment and it might also be a means of assuring regular pay checks.

While the adoption of the Work Break Plan is not compulsory it is hoped that each employee will find enough time to give the plan a fair trial. **(The Management Review.)**

Jobs Late In Life

THE NUFFIELD FOUNDATION has recently produced an extremely interesting booklet entitled "New Jobs for Old Workers", written by F. Le Gros Clark, M.A. and Agnes C. Dunne. It is an examination of the statistical evidence for the provision of alternative occupations for those who, for one of many reasons, transfer to new occupations late in life. How many ageing men find it necessary to make transitions of this kind; what are the difficulties encountered and what jobs await them? These are a few of the questions the authors set out to answer in this, the result of their first investigations.

The study is based on the few available statistics that have any reference to the alternative jobs to which older men are known to move. The figures are extracted from successive Census reports; and information on the jobs themselves was sought from a wide range of industries and government offices. Sixteen occupations have been examined in this way. While these jobs obviously do not include all the possible jobs into which older men could gravitate they do suggest various conclusions.

The following in terms used by the Registrar General are the occupations studied: Watchmen, Office Cleaners, Estate Labourers, Caretakers, Lift Attendants, Bath Attendants, Gardeners, "Others in Personal Service", Hall and Hotel Porters, Lodging and Boarding-House Keepers, "Other Railway Workers", "Other Road Transport Workers", Kitchen Hands, Boilermen, Messengers, "Porters not elsewhere specified".

The report ends with a plea to exert ourselves to widen the range of such jobs and adapt them to the needs of men who would otherwise have to retire from the labour market. A limited number of copies can be obtained free of charge from Nuffield Lodge, Regents Park, London, N.W.1.

A Pernicious Habit

IN his statement at the annual meeting of *Triplex Safety Glass Co. Ltd.* Sir Graham Cunningham, chairman of the company, told the following story. A few weeks ago we took on one or two new employees at one of our works. They came in on Monday but on Tuesday morning one of the men went to his foreman and said "I'd like my cards at lunch-time". "Why?" asked the foreman. "Don't you like the job?" "Oh yes," came the reply, "I like the job all right and my mates are decent fellows, but they work too fast here and if I stayed too long I'd get into the habit myself, so I'm quitting."

Hostels To Close

THE Minister of Labour and National Service has announced that, continuing the gradual reduction of the industrial hostels managed on his behalf by the National Service Hostels Corporation, he intends to close the remaining hostels as soon as possible within the next twelve months. When this has been done, the National Service Hostels Corporation will take steps to wind up its affairs.

Industrial hostels originated early in the war to cater for workers in the munitions and other industries transferred from their homes to places lacking sufficient living accommodation. They have been used since the war to cater for workers transferred to work of major importance for national recovery.

At the peak period of activity the Corporation was managing 74 industrial hostels with 28,000 residents. Last November the Minister announced his intention to reduce the 50 hostels then operating by about half. These have now been reduced to 22 and the number of residents has fallen from 13,700 to 7,500.

Where employers wish to bring workers into an area where the finding of lodgings still presents special difficulty, the Minister hopes that employers will make their own arrangements for accommodating those brought in, for example by taking over the Government hostel premises where this can be arranged and continuing to operate the hostels under private auspices. In some cases both Local Authorities and employers have taken over Government hostels and have continued to operate them.

Retirement

ON September 22 Sir Brunel Cohen, K.B.E., announced his retirement from the chairmanship of the National Advisory Council on the Employment of the Disabled, which he had held since May, 1947.

In resigning the chairmanship of the Council, Sir Brunel has given up only one of his many voluntary activities. He has recently been appointed Chairman of Remploy Ltd., and is a member of the Executive Committee of St. Dunstan's.

Sir Harold Wiles, K.B.E., C.B., is to succeed Sir Brunel as Chairman of the Council. Sir Harold was, until recently, Deputy Secretary at the Ministry of Labour and National Service. He was a member of the Tomlinson Committee which, in 1943, laid down the principles on which the post-war schemes for the disabled were to develop and he was the official principally responsible for putting these schemes into operation at the Ministry of Labour.

APPOINTMENTS

New I.P.M. Officers

THE following officers were elected at the annual general meeting of the Institute of Personnel Management at Harrogate on October 8: president, **MISS M. T. HANKIN**; vice-presidents, **MISS M. F. ROBERTSON** and **MR. D. F. HUTCHINSON**; honorary treasurer, **MR. L. T. BLAKEMAN**; honorary editor, **MR. T. H. HAWKINS**; honorary secretaries, **MISS M. C. STEWART** and **MR. H. G. SMYTH**; immediate past-president, **MR. G. I. GIBBONS.**

MR. R. R. LAIRD, personnel manager of *E. K. Cole Ltd.*, has been re-appointed chairman of the Southend and District Advisory Committee to the Ministry of Pensions and National Insurance for a further term of three years.

How to keep

ABSENTEEISM

in check

Help your staff to resist the menace of coughs, colds and similar ailments that all too frequently keep them from work. Even when staff do not "go sick", their work will suffer if their vitality is low.

Rexall "Plenamins", the multi-vitamin capsules, can be of immense benefit in overcoming inadequate vitamin content in diet, which so often undermines the body's resistance.

Rexall "Plenamins" contain no fewer than *eleven* essential vitamins, including the all-important body-building Red Vitamin B_{12}, together with Folic Acid, Liver Concentrate and Iron. Moreover, a regular daily dose of Rexall "Plenamins" supplies the body with the essential vitamins in quantities sufficient for full bodily health and energy.

You can obtain supplies of Rexall "Plenamins" in bulk quantities from Rexall Drug Co. Ltd., Loughborough, Leicestershire. Write today for full details and industrial terms.

Rexall

Plenamins

PLEASE HELP PLASTICS

THIS man is laying "Safety-Walk" self-adhesive non-slip surfacing. It is a one man job. He does it quickly, easily, without disturbance to work routines or interruption of production.

His work means safety against the slightest risk of slipping and falling; protection for his mates against personal injury—assurance for his management against liability.

"Safety-Walk" is the complete answer to wet, oily and all slippery floor conditions. Its tough lightweight cleats can be used indoors or out; stick and stay put on any clean surface. Its hard grain mineral coating is wear-, wet- and oil-resistant.

Available in four standard cleat sizes.

"SAFETY-WALK"
TRADE MARK
Type 'B' Self Adhesive
'WETORDRY' NON-SLIP SURFACING

Manufactured by:
MINNESOTA MINING & MANUFACTURING CO. LTD.
ADDERLEY PARK · BIRMINGHAM 8

Solo

and Symphony

Time, in terms of finding an executive quickly, is precious. Rediffusion Staff Location saves it.

Staff relations and output are both improved by policy broadcasts given personally by directors and senior executives known to employees.

Enquire how Rediffusion can save time and help to solve labour and production problems in your factory. This entails no obligation, just as its installation entails no capital outlay.

Staff Control through

REDIFFUSION

STAFF ANNOUNCEMENTS · MUSIC WHILE YOU WORK
STAFF LOCATION · TIME SIGNALS

STRATTON HOUSE, PICCADILLY
LONDON, W.1. TEL: MAYFAIR 8886

One of the Broadcast Relay Service group of companies

New Industrial Equipment

EXECUTIVES' SURVEY OF AIDS TO INCREASED PRODUCTION

Efficiency Aids

Readers who wish to know the suppliers of any of the products referred to in this section are asked to write to the Editor, quoting the reference number which appears at the end of the paragraph. We are always glad to consider for publication descriptions — preferably accompanied by an illustration suitable for reproduction—of new products.

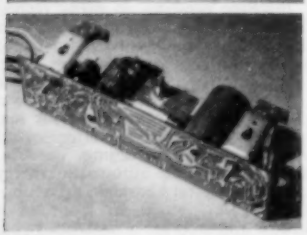
EASY SCREWING

THIS tool has been designed to meet a long-felt want amongst all users of small screwdrivers. When the blade is pushed into the screw slot it automatically takes a firm grip of the screw. It is fully

insulated and, with it, screws may be quite easily withdrawn or inserted into places where fingers cannot reach. So long as the slot is in reasonable condition this screwdriver will take a firm automatic grip of countersunk, round head, cheese head or grub screws. **(PM/1021.)**

NO MORE WIRING

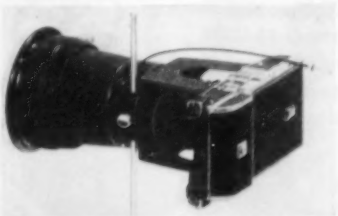
BY means of printed circuits this firm estimates that the existing system of electrical wiring for radios will be rendered out-of-date within the year. Ideal for all purposes where electrical circuits are necessary these are produced by printing the shape of the required connections on the copper surface of a sheet of copper-clad laminated material, and by removing the areas of unprinted copper by etching.



Many of the advantages of using printed circuits arise from the fact that they permit the layout of components to be so arranged that all points of interconnection are in one plane and can be connected together simultaneously by dip-soldering. This technique eliminates the considerable time now spent in manually soldering connections, and it reduces the number of tags, eyelets, wires and screws required. In mass-producing radio receivers, it is estimated that use of dip-soldered printed circuits increases assembly line output by approximately 300 per cent. By eliminating ancillary components this development makes possible considerable reduction in the size and weight of many types of electronic units. The two photographs shown here illustrate the same circuit before and after this process had been applied. **(PM/1022.)**

FAST PHOTOS

THIS American-made oscilloscope camera, designed specifically for recording cathode-ray oscilloscope images, is now available in this country.

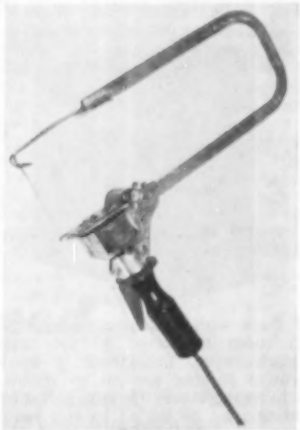


It produces photographic records of high-speed transients, stationary patterns of periodically returning phenomena which can be put on a cathode-ray oscilloscope, and it offers a satisfactory method of studying non-recurring phenomena which occur either too rapidly to permit adequate study, or too slowly to give any continuity.

Combinations of very slow-speed phenomena with occasional high-speed transients can also be studied more readily by this method. The equipment automatically processes the film and delivers finished prints in one minute. A hundred prints can be produced in an hour. **(PM/1023.)**

SEE THE SAW

WITH the aid of this new electro-saw, wood, plastic, hardboard, metal, etc., can be cut with remarkable speed by means of 6,000 vibrations per minute.



It is only available for 220-240 volt A.C. systems, but it is supplied with 4 blades and a free plan of the saw jig. **(PM/1024.)**

MAGIC FILING

A NEW filing unit consists of numbers of rows of cabinets mounted on low trucks which all close up against one another without any intervening gangways. The trucks can be moved along by motor power and so provide access to any series of files required. The individual units move along at a rate of ten metres a minute and are electrically controlled to the width of gangway required and closed as needed. The number of gangways to be opened can be selected at will, so that several people can be in the opened gangways without risk. All rows of shelving are protected from the ingress of light and dust by rubber packing. When work is finished, the whole block automatically closes up together and is secured by a central locking device. It is claimed that, with the aid of this auto-mobile system, storage capacity is increased by 150 per cent. **(PM/1025.)**

Heating & Lighting

CONTROLLED HEAT

THIS *Heatinaire* provides a system of heating by ducted air which is smokeless, constant and controlled. A thermostat which can be pre-set is fitted as standard. This controls the rate of burning so that the minimum of gas is required to maintain a constant temperature.

Two air-cleaning filters are incorporated. The fan unit is designed to give a complete change of air every four or five minutes throughout the whole building in which the system operates. In summer, premises can be air-conditioned by using the fan unit only, without the heating system being brought into operation.

The actual unit is a compact, completely enclosed cabinet. Neat ventilators have been specially designed to fit into,

and flush with, the skirting boards of each room connected to the system. In each room, too, there is an unobtrusive damper control by means of which temperatures in any part of the building may be varied to suit requirements.

The heating units are supplied in two sizes—for industrial premises and private houses. **(PM/1026.)**

LIGHTER ROOFS

EXHIBITED at the British Exhibition in Copenhagen last month was a sample of this corrugated, translucent roofing sheet. In the warehouse shown below this shatterproof corrugated sheeting has been inserted for roof lighting.

The material is low-pressure laminated from glass fibres and polyester resin and provides a new constructional method which has wide possibilities. **(PM/1027.)**

Safety

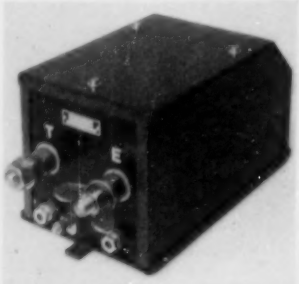
GLASS HATS

WITH a weight of only 13 ounces this new safety helmet of fibre-glass provides a very high degree of protection against impact and penetration by falling objects. It is strongly resistant to moisture and chemicals and can, therefore, be sterilised and disinfected without deterioration. It is, for all practical purposes, electrically non-conductive and non-inflammable and is equally efficient at both extremes of temperature. With six point suspension the harness forms an excellent shock absorber and the one

size in which it is manufactured is adjustable to any head size. Electrically non-conductive it is finished in red, white, black or green, but special colours can be provided if required. **(PM/1028.)**

WELDING SAFETY

THIS new low-voltage Safety Relay gives welders complete protection by ensuring that at no time—except when the arc is being ignited or is burning—is a full open circuit voltage available. The Relay is, in fact, a voltage divider which reduces the full open circuit voltage of the power source—either A.C. or D.C.—by 50 per cent.

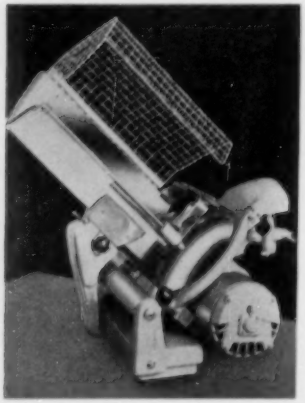


The equipment is simple to install, quite imperceptible in operation, and measures only 14 in. by 7 in. by 7 in. high. It can be fitted to the output side of any welding plant up to a capacity of 500 A. In the case of multi-operator equipment, the Relay must be installed between each regulator and its electrode holder. A local power supply of 220 v. A.C. is required; this can generally be obtained from the input panel of the plant. **(PM/1029.)**

NO CHOPPED FINGERS

IT has been found that a major cause of accident in the use of Gravity Feed Slicing Machines is the practice of using the hand instead of the pusher plate provided to assist food down the chute towards the circular knife, and to overcome this source of danger it appeared necessary to guard the gravity feed chute in such a way as to make it impossible for the operator to touch the food during cutting.

A number of safety devices are incor-



porated in the design of these slicers. The machines are fitted with a specially designed knife guard which protects and covers the blade when the chute is at the end of its traverse; a further safety feature is provided by a switch which automatically stops the motor immediately the knife guard cover is unscrewed for removal. In addition, the makers have now designed a fully guarded gravity feed chute. The guard itself is in the form of a wire mesh cover which completely encloses a lengthened gravity feed chute, and will accommodate a full sized sandwich loaf. At the same time the construction of the thickness plate has been modified to make it virtually impossible at any point for the operator to get his or her fingers in contact with the revolving blade. **(PM/1030.)**

Canteen

WASHING UP

THIS Swiss designed dish-washing machine presents, in many respects, a radical departure from all previous dish-washing systems. Its main features are fully automatic operation, resulting in an important saving of labour, economy of space, optimum utilisation of water and a general layout designed for maximum accessibility of all interior parts for quick and thorough cleaning.

By means of an automatic conveyor system the crockery baskets, driven by an endless chain, move in front of the operator and stop for a controlled period

for the loading of baskets with dirty dishes. The length of the stops can be adjusted, but the usual length of stop is about 20 seconds after which the conveyor automatically moves on. The photograph above shows a basket with dirty dishes entering the washing tunnel, another empty basket gliding towards the operator for loading, while yet another emerges from the washing process for unloading.

In the washing bays the crockery receives three separate washes and emerges in such a hot condition that the crockery dries almost immediately it reaches the open air.

At the end of a day's operation, the empty crockery baskets and conveyor carriages can easily be lifted off. The table representing the front part of the conveyor system folds down and the door over the whole width of the interior tunnel opens, providing easy access to all interior parts of the machine. The interior sieves, spray pipes and all other parts which may become dirty can be readily lifted out and rinsed and the entire inside of the machine can be hosed out.

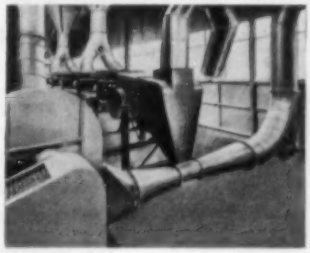
The overall dimensions of the machine are 10 ft. 8 in. long, 4 ft. 5 in. deep and 4 ft. 9 in. high. **(PM/1031.)**

Cleaning

DUST EXTRACTOR

THE pneumatic transport of solids usually entails high capital and running costs. These costs can be excessive in dust extraction and collection installations where the volume of contaminated air that has to be entrained into a plenum system to ensure satisfactory ventilation far exceeds the volume of air required for the pneumatic transport of the particulate matter suspended in the entrained air.

In this dust extraction system, where the collected dust has to be conveyed some distance to the final disposal point, this tendency has been mitigated to some extent by siting the dust separator as near as possible to the area of extraction and employing an independent pneumatic transport system to carry the dust to the disposal point. Only the minimum amount of air necessary to prevent dust settling in the ducts is used and this is much less than the volume of air originally entrained, resulting in savings in power and capital costs. Furthermore, this air can be drawn from outside the building and is, therefore, clean, thus avoiding wear and abrasion of the fan impellor.



(PM/1032.)

MRS. MOP

CLEANING the floors without the necessity for the operator's hands touching the water reduces the danger of dermatitis or injury. With the aid of the "Step-on-It" Wringer Bucket the largest mops can be wrung dry by means of the automatic foot controlled pressure which applies a double action squeeze of the rollers. Fatigue is reduced by avoiding the necessity of bending and the bucket and wring gear are lightweight.

The mop head fitting is elongated and strengthened by a piece of $\frac{1}{8}$ in. steel. It is also partially flat. These two features enable the mop to be squeezed in the bucket rollers more easily and save considerable wear and tear on the yarn.

(PM/1033.)

The skilled man you need...

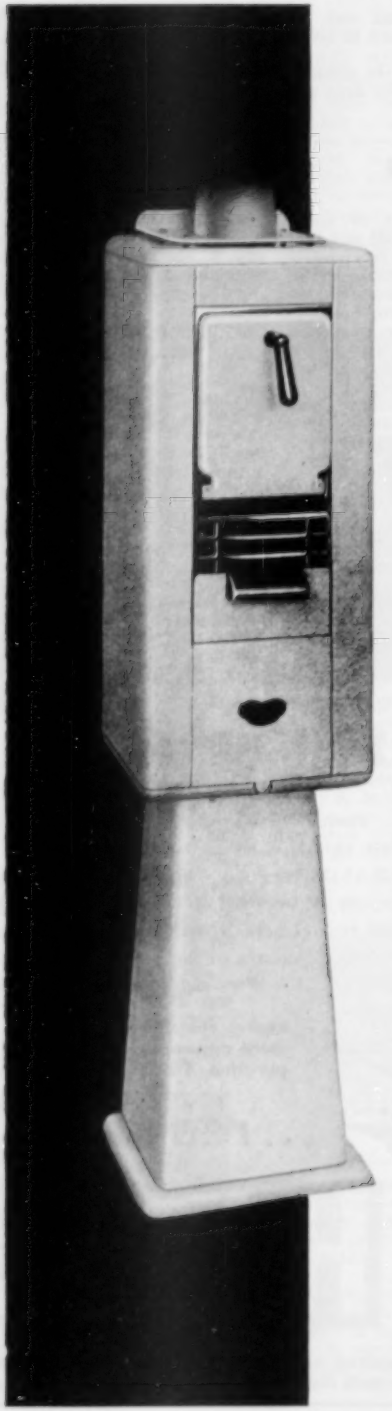
* Out of a total DAILY HERALD readership of 6,786,000 —I.P.A. Survey.

...almost certainly he is one of the nearly 4,000,000* skilled workers who read the DAILY HERALD every day—and read it carefully! Employers all over the country are finding the skilled replacements they want by advertising in the classified columns of the DAILY HERALD. Why don't you do the same?

Every classified advertisement appears in ALL copies, covering TOTAL circulation.

...reads the DAILY HERALD

Rate 20/- per line. Communications should be addressed to: Classified Advertisement Manager, DAILY HERALD, Acre House, Long Acre, London, W.C.2. Tel.: Temple Bar 1200 (Ext. 454 and 466).



Safeguard Public Health Encourage Personal Hygiene

in FACTORIES · HOSPITALS · CLINICS SCHOOLS · HOTELS AND OFFICES

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Management Bookshelf

INDUSTRIAL catering calls for considerable reserves of energy, initiative and specialised knowledge. With the intention of helping all canteen planners *Stotts of Oldham* have published a booklet entitled "Large Scale Kitchens and Their Planning". It describes by progressive stages the planning of a large scale industrial kitchen. Taking a rectangular kitchen of 1,200 sq. ft. floor area (a kitchen of this size will cater adequately for 250 people) it shows how each section is added until the kitchen is complete. Starting with the cold room the sequence of operations grows by adding the General and Vegetable Stores, Vegetable Preparation, Pastry, Meat and Fish Preparation, Kitchen Staff Room, Office Working Equipment, Washing-up Facilities and Service Counter. The booklet is clearly presented with a diagram for each stage and plenty of additional information.

The booklet will be of great help to all those planning industrial canteens for good layout can result in considerable economy by increasing labour efficiency and reducing breakages. Copies can be obtained, free, from 167, Oxford Street, London, W.1.

Superlatives

The Guinness Book Of Records. *Guinness Superlatives Ltd., Ludgate House, Fleet Street, London.*

THERE are odd moments in everyone's life and this book has been made for them. True, most of the facts are useless for the struggle to earn one's daily bread but they constitute a mass of fascinating information and, as a means of settling arguments, there is nothing better at the ridiculously low price of 5s.

There is not the space here to describe the contents in any detail but they give a rich and entertaining outline of man's incredible achievements and his uncurable persistence in the eccentric. It does the same thing for the Earth we inhabit.

The personnel manager or the welfare officer who adds this volume to the works library will have done a most sensible and commendable act. Better still, buy two or three copies for they will most certainly be needed.

New Books

Training And Education For Management In The Iron and Steel Industry. Examines methods of furthering training of men likely to become departmental managers in the industry and contains recommendations both for individual firms and for the training committee itself.

Earning Opportunities for Older Workers. Published by the University of Michigan Press. Symposium on the present barriers to continued employment of older men and women and on how their abilities can be best used and adapted to paid jobs.

Teaching Management. By Harry Newman and D. M. Sidney. Published by *Routledge & Kegan Paul Ltd.* 15s. A practical handbook on management education with special reference to the case study method.

Co-partnership Re-examined. By William Wallace, C.B.E. Published by the Industrial Co-partnership Association. 4s. 6d. The case for co-partnership to-day as seen by a leading industrialist.

Report of the Chief Registrar of Friendly Societies for 1954. Part 3. Industrial and Provident Societies. *H.M.S.O.* 5s.

The Development of Supervisors. By William Durham. Published by the Industrial Welfare Society. 2s. 6d. Survey on how far the training of British supervisors has gone in actual practice.

I.P.M. CONFERENCE REPORT *(continued from page 280)*

"But", warned Sir Ian, "matters are not going to end here. We shall have to recruit and train considerably greater numbers than we actually need—until things find their own level."

The concluding Conference paper, Mr. Waring's on *Current Research in Human Relations in Industry*, can be recommended as a very useful guide as to what has been, and is being, done in this comparatively new science. It had the qualities of clarity and conciseness, giving the main facts without being bogged down by laborious detail. Among other things, he pointed out:

"Much good work has been done by a comparatively few able social scientists but hitherto they have seldom had the opportunity of doing continuous work in this field and in consequence when they come to the end of an assignment they tend to take up other careers that will provide them with permanent employment. The extensive range of projects initiated has been a great encouragement to them, particularly as there is every prospect that the projects now being carried out will be succeeded by others."

Mr. Waring was referring to the Human Relations Committee set up jointly by the Department of Scientific and Industrial Research and the Medical Research Council to whom close on 100 projects have been submitted of which 27 have been accepted and are under way.

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Summary of Official Publications

READERS' GUIDE TO ACTS, STATUTORY ORDERS, NEW RULINGS AND AWARDS CONCERNING INDUSTRY AND PERSONNEL

GENERAL

Carbon Monoxide (CO) Poisoning. Cautionary Notice. Broadsheet describing symptoms, First Aid and methods of applying artificial respiration. Factory Form 932. *H.M.S.O.* 9d.

Choice of Careers, New Series, No. 16. The Architect. 2nd edition. Published by Ministry of Labour and National Service. *H.M.S.O.* 1s.

Firemen's Pension Scheme. Allocation of Pensions. Explanatory Memorandum. Joint publication of the Home Office and the Scottish Home Department. *H.M.S.O.* 6d.

Gassing and Burns. Cautionary Notice. Broadsheet describing methods of prevention, general treatment and artificial respiration. Factory Form 395. *H.M.S.O.* 9d.

International Digest of Health Legislation. Vol. 6, No. 2, 1955. Published by United Nations World Health Organisation. *H.M.S.O.* 12s.

Labour Gazette, Vol. LXIII, No. 9. September, 1955. Published by Ministry of Labour and National Service. *H.M.S.O.* 1s. 6d.

Memorandum No. 32. Diagnosis and Treatment of Haemophilia and Its Related Conditions. By R. G. Macfarlane, M.D., and R. Biggs, M.D. Published by Medical Research Council. *H.M.S.O.* 2s. 6d.

Physical Training, Basic and Battle. Part XII. Fitness Training Tables for Boys, 1947. Published by War Office. *H.M.S.O.* 1s.

Safety in Mines, Research Board Paper No. 105. Prevention of Coal Dust Explosions. Part I. Effect of Manner of Distribution of Stone Dust. By S. Jones and F. V. Tideswell. Published by Ministry of Fuel and Power. *H.M.S.O.* 1s. 3d.

Safety Pamphlet, No. 25. Support Behind Power Loaders. Memorandum by the Nottinghamshire and North Derbyshire Advisory Committees on Support of Workings. Published by Ministry of Fuel and Power. *H.M.S.O.* 6d.

Superannuation—Pensions Increase and National Insurance. Circular No. 47/55. Published by Ministry of Housing and Local Government. *H.M.S.O.* 3d.

STATUTORY INSTRUMENTS

No. 1366. The Retail Furnishing and Allied Trades Wages Council (Great Britain) Wages Regulation (Amendment) (No. 2) Order, 1955. Dated August 31, 1955, made by Minister of Labour and National Service under Section 10 of the Wages Council Act, 1945 (a). *H.M.S.O.* 3d. Amends definitions of Customary Holiday contained in the Retail Furnishing and Allied Trades Wages Council (Great Britain) Wages Regulation Order, 1953 (Order R.F.A. (16)). Operative from 16/9/55.

No. 1382. The National Insurance (Industrial Injuries) (Benefit) Amendment Regulations, 1955. Dated September 6, 1955, made by Minister of Pensions and National Insurance under Section 32 (1) of the National Insurance (Industrial Injuries) Act, 1946 (a). *H.M.S.O.* 2d. Amends National Insurance (Industrial Injuries) (Benefit) Regulations, 1948, removing disqualification for receiving death benefit in cases of persons absent from Great Britain which hitherto applied to them and also revokes provisions suspending payment of death benefit in such cases. Operative from 10/9/55.

No. 1416. The Perambulator and Invalid Carriage Wages Council (Great Britain) Wages Regulation Order, 1955. Dated September 12, 1955, made by Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. Sets out the statutory minimum remuneration payable in substitution for that fixed by the Perambulator and Invalid Carriage Wages Council (Great Britain) Wages Regulation Order, 1952. Orders I. (53) and (57) are revoked. Operative from 26/9/55.

No. 1458. The Paper Bag Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1955. Dated September 19, 1955, made by Minister of Labour and National Service under Section 10 of the Wages Council Act, 1945 (a). *H.M.S.O.* 3d. Increases statutory minimum remuneration fixed by Paper Bag Wages Council (Great Britain) Wages Regulation Order, 1954, Order (P. 56) and Order (P. 58). Order P. 58 is revoked. Operative from 5/10/55.

No. 1516. The Made-Up Textiles Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1955. Dated September 28, 1955, made by Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 3d. Increases statutory minimum remuneration fixed by Order M.T. (40) and varies day upon which holiday remuneration for customary holiday is to be paid. Order M.T. (40) is revoked. Operative from 14/10/55.

No. 1517. The Paper Box Wages Council (Great Britain) Wages Regulation (Amendment) Order, 1955. Dated September 28, 1955, made by Minister of Labour and National Service under Section 10 of the Wages Councils Act, 1945 (a). *H.M.S.O.* 4d. Increases statutory minimum remuneration fixed by Orders B. (52) and B (56). Order B. (56) is revoked. Operative from 14/10/55.

INDUSTRIAL DISPUTES TRIBUNAL AWARDS

No. 745. Wages and Conditions of Employment of Workers Employed by a Firm of General Engineers and Arc Welders at Barnet. Claim: That the wages and conditions of employment of the workers concerned should be no less favourable than those provided for in specified agreements in the engineering industry. **Award:** Claim established with effect as regards payment for annual holidays as from and in respect of the annual holiday period for 1954 and as regards wage rates as from the beginning of the first full pay period following 7/9/55. (7/9/55.)

No. 746. Rates of Wages, Working Week and Certain Other Conditions of Employment of Tugboatmen Employed on the River Wear. Claim: For an increase in wages, for a reduction in the working week, and for certain other revisions of present conditions of employment. **Award:** Claim established. Wage rates of workers concerned increased by 7½ per cent. and payment for attending fires on Sundays to 15s. per man. (8/9/55.)

No. 747. Lunch Break for Office Staff Employed at a Tyre and Rubber Factory at Burton-on-Trent. Claim: Duration of lunch break. **Award:** Duration of lunch break for these workers should be one hour. (12/9/55.)

No. 748. Salary Scales and Overtime Conditions of Administrative, Supervisory and Clerical Staff Employed by the Dunlop Rubber Company at their Factory at Speke, Liverpool. Claim: For the establishment of certain specified salary scales and conditions of service. **Award:** Claim not established. (12/9/55.)

No. 749. Terms and Conditions of Employment of an Employee of the Portland Urban District Council. Claim: Whether the Portland Urban District Council in respect of the post held by Mr. C. H. Carter and designated by the Council as maintenance fitter should observe the Scheme of Conditions of Service established for the Miscellaneous Classes of Officers by the National Joint Council for Local Authorities' Administrative, Professional, Technical and Clerical Services. **Award:** That the recognised terms and conditions of employment of the National Joint Council mentioned above are applicable to Mr. C. H. Carter, with effect from 13/2/54. (19/9/55.)

No. 750. Break Period for Workers Employed in the Hosiery Industry. Claim: For amendment of provisions in current agreement relating to break periods. **Award:** Claim established. Agreement on Wages and Conditions amended to read: "That where break times are staggered—and provided it is understood that each operative must take the break as provided in the Clause—overlooking a second job can be arranged by mutual agreement at factory level." (22/9/55.)

No. 751. Observance of Recognised Terms and Conditions of Employment by a Firm of Constructional Engineers at Sheffield. Claim: Whether the Employers should observe terms and conditions of a specified agreement in the engineering industry. **Award:** Claim established. Recognised terms and conditions of employment applicable to the case are those determined through agreements between the Engineering and Allied Employers National Federation and the Constructional Engineering Union. (23/9/55.)

CIVIL SERVICE ARBITRATION TRIBUNAL AWARDS

No. 290. Constructors and Assistant Constructors in the Royal Corps of Naval Constructors. Claim: For increase in pay with retrospective effect. **Award:** That the following increases be paid to Constructors and Assistant Constructors in the Royal Corps of Naval Constructors, Admiralty (London, male); Constructor: £1,030 to £1,440, with effect from February 1, 1952; £1,200 to £1,650, with effect from January 1, 1953; Assistant Constructor: £690 to £1,075, with effect from January 1, 1953. Claim for Assistant Constructor with effective date February 1, 1952, not established (19/8/55.)

No. 291. District Officers of H.M. Coastguard. Claim: For increase in pay with retrospective effect. **Award:** That the salary scale of District Officers of H.M. Coastguard (Ministry of Transport and Civil Aviation) shall be £465 to £550, with effect from December 1, 1953, and £490 to £575, with effect from October 1, 1954. (23/9/55.)

New Trade Lists

Philips 1955/1956 Lighting Catalogues. Lamp catalogue, 76 pp., covers tungsten, fluorescent and discharge lamps, motor car and cycle bulbs and special lamps. Fittings catalogue, 44 pp., gives details of firm's fittings for fluorescent, tungsten, contemporary, blended, mercury and sodium lighting.

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Austin Commercial Vehicle Supplement. Includes full specifications of all the firm's new commercial vehicles and engines introduced during 1955 and incorporates minor modifications to the specifications of existing vehicles.

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November Diary for Management

BRITISH INSTITUTE OF MANAGEMENT

2-4 **Harrogate.** 1955 National Conference.
23 **Management House, London.** Agricultural Management Conference.
25-26 **Management House, London.** Management Education Conference.

BRITISH WELDING RESEARCH ASSOCIATION

9-10 **Birmingham College of Technology.** Increasing Productivity by the Use of Welding by the Latest Techniques.

BURTON MANOR

7-18 Supervisory Management. Course designed to meet needs of foremen.
7-18 The Nature of Management, Part I. Course for middle grades of management.
27-Dec. 2. Electrical Safety. Course for foremen in charge of electrical appliances.

COLLEGE OF PRODUCTION TECHNOLOGY

7-12 Five-day Course on "Method Study".
7-18 Two-week Course on "Materials Handling".
21-25 Five-day Course on "Work Study".
21-25 Five-day Course on "Materials Handling".
28-Dec. 2. Five-day Course on "Work Study".
28-Dec. 2. Five-day Course on "Materials Handling".

INDUSTRIAL WELFARE SOCIETY

Residential Courses and Conferences
4-7 **Grange-over-Sands, Grand Hotel.** Canteen Managers' Conference.
25-28 **Bournemouth, Bourne Hall Hotel.** Office Executives' Conference.
Non-residential Courses at Robert Hyde House.
9-10 Advanced Course for Women Supervisors.
15-18 Course for Newly-Appointed Foremen and Chargehands.
Day Courses and Meetings at Robert Hyde House.
1 Manual Lifting and Handling Course.
15 Celebrity Luncheon.
16 Some Problems of Personnel Administration.
17 Luncheon for Foremen.
24 Meeting of the Industrial Editors' Welfare Group.
29 Small Firms Conference.
Courses And Meetings Outside London.
3 **Bristol.** Advisory Meeting.
8 **Ilford.** Conference on "Some Management Priorities Today".
9 **Hull.** Current Management Problems.
9 **Bradford.** Manual Lifting and Handling.
15 **Manchester.** Canteens Day Course.
17 **Cardiff.** Women Supervisors.
17 **Bradford.** Canteens Day Course.
23 **Leeds.** Women Supervisors.
30 **Dartford.** Conference on "Some Management Priorities Today".
30 **Coventry.** Canteens Day Course.

INSTITUTE OF INDUSTRIAL SUPERVISORS

4-6 **Dillington House, Ilminster.** "Industrial Relations, Industrial Law—Voluntary and Legal Responsibilities of Shop Floor Management."
19-21 **Dillington House, Ilminster.** "Human Relations, Communication and Discipline."

INSTITUTE OF PERSONNEL MANAGEMENT

6-11 **London.** Five-day Study Course on "Wage and Salary Structure and Administration".
8 **Manchester.** One-day Discussion Meeting.

INSTITUTION OF PRODUCTION ENGINEERS

2 **Stafford Technical College.** Talk on "Increased Automation of Existing Production Lines".

INSTITUTION OF WORKS MANAGERS

19 **London.** Annual General Meeting.

NATIONAL INSTITUTE OF INDUSTRIAL PSYCHOLOGY

7-11 **London.** Course for Managers.
15-16 **London.** Two-day Conference on Selection Methods.
17-18 **London.** Two-day Conference on Staff Assessment Procedures.
28-30 **London.** Course for Supervisors.

URCHFONT MANOR

28-Dec. 8. "The Human Factor in Industry." Course for Foremen, Chargehands and Union Representatives.

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Help For School Leavers

EDUCATION of the Young Worker is the theme of a conference which the Department of Education in the University of Oxford will be holding from April 7 to 13 next year. The conference will consider the needs of young workers preparing for relatively unskilled occupations: who leave school at 15 to work in mines and factories, on the land, in homes, shops and offices, in transport and other services; whose brief training offers few opportunities of intellectual and personal development. It is hoped that the conference will be attended by many representatives of industry, education and administration, and all those concerned with the well-being of young people who have recently left school.

Women Draw Level

EQUAL pay for women is to be introduced in the administrative, technical, and clerical grades on British Railways. Announcing last month that this had been agreed in principle with the unions concerned, the British Transport Commission emphasised that women would be paid at the same rates as men only where their work and responsibility were exactly the same.

Fair Shares For All

PROFIT sharing might be extended to some nationalised undertakings, suggested Mr. W. S. Carrington, president of the Institute of Chartered Accountants, in his presidential address to the autumn meeting of the Institute at Southport.

The only thing which could really ensure anything like our present standard of living, he declared, was greatly increased production. One of the factors necessary to achieve this was a greater sense of responsibility on the part of workers and the elimination of restrictive practices on every side of industry.

"In appropriate cases, an effective way of bringing about this sense of responsibility and of giving tangible proof of the fundamental unity of interest of those who work in a business and those who own it, may be to give the employees a financial reward additional to wage or salary—one which moves in direct unison with profits and which provides a true feeling of part ownership", he said.

"I consider that the need spreads beyond the field of limited companies and might even extend to nationalised undertakings, which will, of course, present difficult and peculiar problems, although they should be capable of solution. Although co-partnership in this field is obviously out of the question there should be workable possibilities in schemes of profit-sharing in some nationalised undertakings."

Choosing A Secretary

(continued from page 283)

So this model interviewer even allowed for his own biases. However, Miss Layton's other qualities, her test results and her references all added proof that she was the right girl and she was appointed. She has now been successfully and happily employed for nearly a year.

This interview, because of the way it was conducted, was a useful means of selection, and it was supported by all the evidence the interviewer could obtain from other sources.

Secretaries are a group of employees who must be exceptionally carefully selected—if only because the word "secretary" now covers a variety of occupations and a range of abilities. The London Chamber of Commerce has been concerned about the increasing vagueness of the term and is now introducing a new type of examination for secretaries. The papers and practical work cover realistically the skills and knowledge required of a first-class secretary and successful candidates will be awarded the London Chamber of Commerce Diploma. As the scheme develops it should certainly help selectors and secretaries alike.

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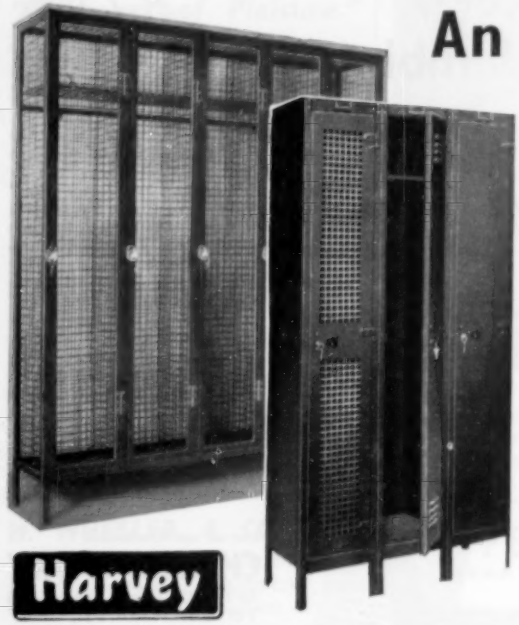

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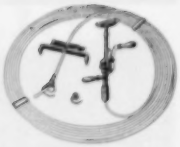

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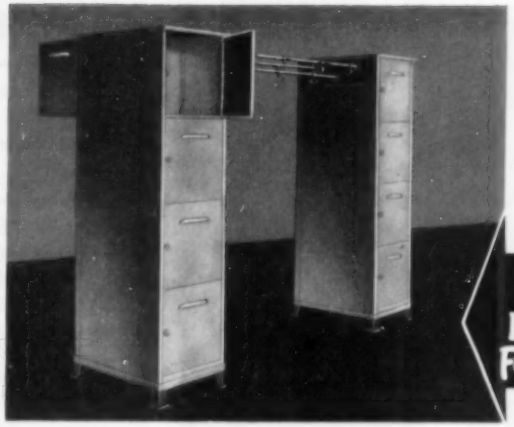

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